

## Division of Investment Management Analytics Office

# **Private Funds Statistics**

Third Calendar Quarter 2021

March 30, 2022

This is a report of the Staff of the Division of Investment Management's Analytics Office of the U.S. Securities and Exchange Commission. The Commission has expressed no view regarding the analysis, findings, or conclusions contained herein.

#### Introduction

This report provides a summary of recent private fund industry statistics and trends, reflecting data collected through Form PF and Form ADV filings.<sup>1</sup> Form PF information provided in this report is aggregated, rounded, and/or masked to avoid potential disclosure of proprietary information of individual Form PF filers.

This report reflects data from Fourth Calendar Quarter 2019 through Third Calendar Quarter 2021 as reported by Form PF filers.<sup>2</sup> Please see the Appendix for information on the categories of Form PF filers, the definitions of capitalized terms, a description of the boxplots used in several figures, as well as other technical descriptions.

The Staff continues to work with data reported on Form PF and with filers to identify and correct filing errors. Staff updates reported statistics based on amended filings and also may make certain adjustments to the statistics presented to correct what appear to be clear filing errors. Further, the Staff has employed certain assumptions in aggregating the data. Future adjustments to these methodologies and amended filings that change the underlying data could lead to changes in previously reported statistics.

If you have any questions or comments about Third Calendar Quarter 2021 Private Funds Statistics, please contact:

Tim Dulaney, PhD, FRM, Tim Husson, PhD, FRM, or Trevor Tatum at FormPF@sec.gov with subject line "Third Calendar Quarter 2021-Private Funds Statistics".

<sup>&</sup>lt;sup>1</sup>Only SEC-registered advisers with at least \$150 million in private fund assets under management must report to the Commission on Form PF. SEC-registered investment advisers with less than \$150 million in private fund assets under management, SEC exempt reporting advisers, and state-registered investment advisers are not required to file Form PF, but report general information about the private funds they manage on Form ADV.

<sup>&</sup>lt;sup>2</sup>The Commission began receiving Form PF filings from Large Hedge Fund Advisers in July 2012. A full data set was not received until March 2013. This report relies upon the Form PF database constructed and maintained by the Office of Research and Data Services in the Division of Economic and Risk Analysis.

## Contents

I	Number of Funds and Advisers	4
II	Gross and Net Assets	5
A	Aggregate Assets by Fund Type over Time	5
В	Borrowings	8
C	Fair Value Hierarchy	10
D	Parallel Managed Accounts	11
III	Fund Domiciles and Adviser Main Offices	13
IV	Beneficial Ownership	15
A	All Private Funds	15
В	Qualifying Hedge Funds	16
C	Section 3 Liquidity Funds	17
D	Section 4 Private Equity Funds	18
Е	Concentration	19
$\mathbf{V}$	Derivatives	20
VI	Additional Hedge Fund Industry Information	21
A		21
В	Industry Concentration	22
С	Single-Strategy US-Domiciled Hedge Funds	24
D	Single-Strategy Non-US-Domiciled Hedge Funds	26
VII	Information Reported by Large Hedge Fund Advisers	28
A		28
В	Industry Concentration	30
С	Portfolio Turnover	31
D	Region and Country Exposure	32
VIII	Qualifying Hedge Fund Specific Information	34
A		34
В		
С	·	38
D	Investment Exposures	39
E		41
$\mathbf{F}$		42
G		44
Н	Central Clearing	47
I	Value-at-Risk ("VaR") Reporting	48

J	Stress Testing and VaR	49
K	Stress Testing	50
IX	Section 3 Liquidity Fund Specific Information	<b>52</b>
A	Liquidity	52
В	B Portfolio Characteristics	52
C	Rule 2a-7 Compliance	55
D	Methods of Calculating NAV	55
Е	Aggregate Portfolio Holdings	56
X	Section 4 Private Equity Fund Specific Information	57
A	CPC Industry Concentration	57
В		58
C	C CPC Investments by Region and Country	59
ΧI	Appendices	61
A	Form PF Filer Categories	61
	1 All Private Fund Advisers	61
	2 Large Hedge Fund Advisers	61
	3 Large Liquidity Fund Advisers	62
	4 Large Private Equity Fund Advisers	62
	5 Other Private Fund Advisers	62
В		63
C		63
D		64
Е		65

## I Number of Funds and Advisers<sup>3</sup>

Table 1: Number of Funds
The "Total" row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Fund Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Equity Fund	14,347	14,484	14,496	14,493	15,734	15,823	15,861	15,835
Hedge Fund	9,309	9,384	9,416	9,477	9,374	9,479	9,615	9,484
Other Private Fund	4,966	4,968	4,973	4,961	5,380	5,396	5,374	5,339
Section 4 Private Equity Fund	4,394	4,405	4,405	4,408	5,267	5,292	5,308	5,309
Real Estate Fund	3,118	3,119	3,115	3,116	3,289	3,292	3,295	3,289
Qualifying Hedge Fund	1,821	1,825	1,814	1,780	1,793	1,860	1,966	2,013
Securitized Asset Fund	1,719	1,721	1,721	1,726	1,847	1,852	1,900	1,895
Venture Capital Fund	1,156	1,158	1,155	1,150	1,422	1,422	1,424	1,419
Liquidity Fund	65	64	67	69	72	73	76	77
Section 3 Liquidity Fund	43	41	45	47	53	54	56	57
Total	34,680	34,898	34,943	34,992	37,118	37,337	37,545	37,338

Table 2: Number of Advisers Advising Each Fund Type
The "Total" row shows the total reported, and will not equal the sum of the preceding rows,
because the rows are not mutually exclusive.

Fund Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Equity Fund	1,357	1,362	1,364	1,367	1,448	1,454	1,457	1,455
Hedge Fund	1,734	1,731	1,727	1,728	1,759	1,759	1,764	1,758
Other Private Fund	647	643	644	642	688	690	688	679
Section 4 Private Equity Fund	323	325	325	326	366	367	369	369
Real Estate Fund	375	375	372	373	388	388	389	388
Qualifying Hedge Fund	554	543	540	530	545	568	589	592
Securitized Asset Fund	161	160	160	161	162	162	163	162
Venture Capital Fund	153	154	153	152	178	177	176	176
Liquidity Fund	36	36	37	38	37	37	37	37
Section 3 Liquidity Fund	22	21	22	23	24	24	24	24
Total	3,238	3,240	3,240	3,237	3,381	3,386	3,390	3,379

<sup>&</sup>lt;sup>3</sup>In this report, "Funds" means all private funds reported on Form PF and "Advisers" means all SEC-registered investment advisers that file a Form PF to report private funds. Please see Appendix E for definitions of other capitalized terms used in this report.

#### II Gross and Net Assets

#### A Aggregate Assets by Fund Type over Time

Table 3: Aggregate Private Fund Gross Asset Value (GAV) (\$ Billions)

As reported on Form PF, Question 8.

The "Total" row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Fund Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Hedge Fund	8,180	7,746	7,780	8,207	8,776	8,920	9,583	9,778
Qualifying Hedge Fund	6,713	6,322	6,403	6,825	7,096	7,233	7,893	8,301
Private Equity Fund	3,736	3,811	3,809	3,811	4,713	4,821	4,824	4,825
Section 4 Private Equity Fund	2,743	2,795	2,795	2,796	$3,\!586$	3,665	3,673	3,674
Other Private Fund	1,396	1,367	1,382	1,391	1,476	1,495	1,507	1,436
Real Estate Fund	662	666	666	666	811	810	810	812
Securitized Asset Fund	649	647	647	649	705	707	724	723
Liquidity Fund	296	301	309	329	326	314	330	310
Section 3 Liquidity Fund	291	295	306	326	324	312	328	308
Venture Capital Fund	144	144	145	150	225	223	222	222
Total	15,062	14,682	14,737	15,203	17,033	17,290	18,000	18,105

Table 4: Aggregate Private Fund Net Asset Value (NAV) (\$ Billions)

As reported on Form PF, Question 9.

The "Total" row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Fund Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Hedge Fund	4,135	3,782	4,092	4,300	4,664	4,813	5,133	5,111
Qualifying Hedge Fund	3,238	2,917	3,215	3,401	3,574	3,740	4,057	4,161
Private Equity Fund	3,305	3,374	3,374	3,374	4,161	4,264	4,269	4,269
Section 4 Private Equity Fund	2,442	2,493	2,493	2,493	3,203	3,276	3,283	3,283
Other Private Fund	1,232	1,204	1,215	1,229	1,299	1,317	1,340	1,273
Real Estate Fund	504	507	507	507	615	613	613	615
Securitized Asset Fund	205	202	202	204	213	211	214	215
Liquidity Fund	293	297	303	323	322	304	319	302
Section 3 Liquidity Fund	288	291	300	320	320	302	317	300
Venture Capital Fund	137	138	138	144	218	215	214	215
Total	9,811	9,504	9,832	10,081	11,492	11,738	12,102	12,000

**Figure 1:** GAV and NAV Distributions See Appendix C for an explanation of boxplots. As reported on Form PF, Questions 8 and 9.

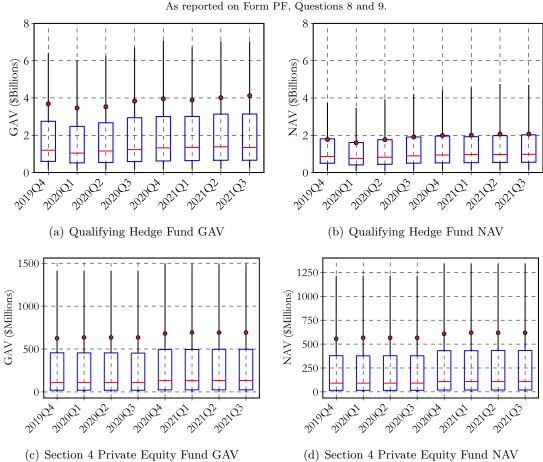
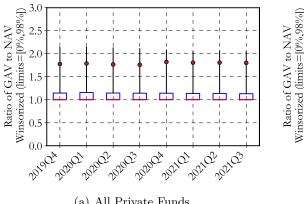
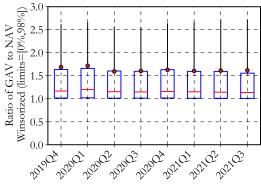


Figure 2: Ratio of GAV to NAV

See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Questions 8, 9, and 10.





(a) All Private Funds

(b) Qualifying Hedge Funds

#### **B** Borrowings

**Table 5:** Aggregate Borrowings (Percent of Aggregate GAV) As reported on Form PF, Questions 8, 12, and 43 (Third Month).

Fund Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Securitized Asset Fund	52.5	49.0	47.7	47.5	53.8	50.5	50.4	50.2
Qualifying Hedge Fund	47.4	45.9	45.3	47.0	45.6	45.2	45.7	44.6
Hedge Fund	43.5	42.3	41.3	43.0	41.0	40.9	41.6	41.3
Real Estate Fund	14.8	14.9	14.6	14.6	13.8	13.9	13.6	14.0
Section 4 Private Equity Fund	7.3	7.3	7.3	7.3	5.1	4.9	4.9	4.9
Private Equity Fund	6.5	6.4	6.4	6.4	5.0	4.7	4.7	4.7
Other Private Fund	4.5	4.8	4.7	4.8	5.0	4.9	4.1	3.9
Venture Capital Fund	0.8	0.7	0.8	0.8	0.5	0.5	0.5	0.5
Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 3 Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Figure 3:** Distribution of Total Borrowings for All Private Funds and Qualifying Hedge Funds

See Appendix C for an explanation of boxplots. As reported on Form PF, Questions 12 and 43 (Third Month).

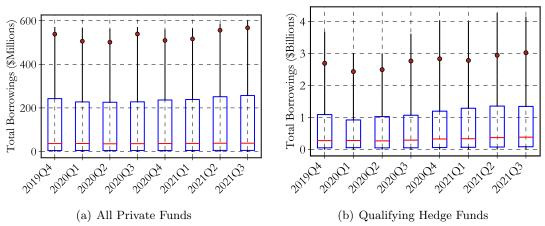
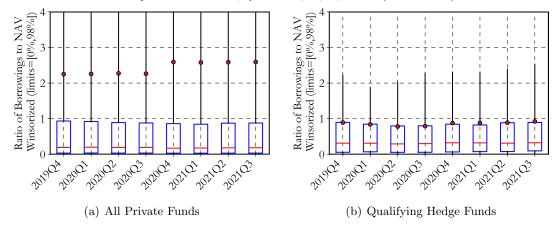


Figure 4: Ratio of Borrowings to NAV

See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Questions 9, 10, 12, and 43 (Third Month).



**Table 6:** Aggregate Borrowing by Creditor Entity Type (Percent) As reported on Form PF, Questions 12 and 43 (Third Month).

Creditor Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
US Financial	65.6	64.9	66.7	64.7	66.3	67.2	67.7	67.0
Non-US Financial	31.1	32.4	30.8	32.9	30.4	30.1	29.9	30.5
US Non-Financial	2.4	2.6	2.5	2.4	2.3	2.4	2.2	2.3
Non-US Non-Financial	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9

## C Fair Value Hierarchy

**Table 7:** Assets According to Fair Value Hierarchy (\$ Billions) As reported on Form PF, Question 14.

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Level One	3,849	3,816	3,825	3,836	4,249	4,279	4,315	4,383
Level Two	3,486	3,510	3,500	3,519	3,651	3,633	3,642	3,644
Level Three	4,061	4,113	4,118	4,128	5,070	5,171	5,202	5,273
Cost-Based	2,369	2,354	2,345	2,342	2,333	2,339	2,333	2,323

**Table 8:** Liabilities According to Fair Value Hierarchy (\$ Billions) As reported on Form PF, Question 14.

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Level One	1,284	1,298	1,289	1,299	1,344	1,336	1,340	1,342
Level Two	1,033	1,068	1,059	1,066	1,197	1,175	1,179	1,197
Level Three	264	268	268	267	294	296	303	338
Cost-Based	2,231	2,238	2,228	2,228	2,067	2,080	2,075	2,071

#### D Parallel Managed Accounts<sup>4</sup>

Table 9: Number of Funds with Parallel Managed Accounts

As reported on Form PF, Question 11.

The "Total" row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Hedge Fund	614	628	610	601	597	581	574	558
Qualifying Hedge Fund	222	232	227	221	210	199	199	206
Other Private Fund	505	501	500	493	478	475	487	486
Section 4 Private Equity Fund	136	136	135	135	103	103	115	115
Private Equity Fund	332	331	330	330	311	311	312	312
Liquidity Fund	12	12	11	11	***	***	***	***
Section 3 Liquidity Fund	11	11	11	11	11	11	11	***
Real Estate Fund	95	95	95	95	73	73	73	73
Venture Capital Fund	***	***	***	***	17	17	17	17
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	1,565	1,574	1,553	1,537	1,489	1,470	1,477	1,459

Table 10: Aggregate Value in Parallel Managed Accounts (\$ Billions)

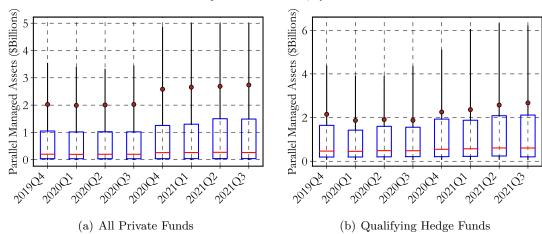
As reported on Form PF, Question 11.

The "Total" row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Hedge Fund	717	637	638	634	764	768	808	840
Qualifying Hedge Fund	477	433	434	414	473	470	512	550
Other Private Fund	2,068	2,052	2,044	2,028	2,583	2,620	2,647	2,642
Section 4 Private Equity Fund	38	38	38	38	44	44	68	68
Private Equity Fund	58	58	58	58	98	98	98	98
Liquidity Fund	317	378	366	383	***	***	***	***
Section 3 Liquidity Fund	316	377	366	383	391	411	396	***
Real Estate Fund	10	10	10	10	7	7	7	7
Venture Capital Fund	***	***	***	***	1	1	1	1
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	3,171	3,135	3,117	3,113	3,845	3,905	3,970	3,993

<sup>&</sup>lt;sup>4</sup>Certain data points in the tables in this section and other sections may be masked to avoid possible disclosure of proprietary information of individual Form PF filers.

**Figure 5:** Parallel Managed Account Value Distributions See Appendix C for an explanation of boxplots. As reported on Form PF, Question 11.



## III Fund Domiciles and Adviser Main Offices

Table 11: Fund Domicile (Percent of NAV) As reported on Form PF, Question 9 and Form ADV.

		Al	l Private	Funds				
Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
United States	51.2	51.4	50.9	50.4	51.1	50.9	50.0	49.6
Cayman Islands	34.5	34.1	34.6	34.9	34.3	34.2	34.3	34.8
Ireland	4.6	4.5	4.6	4.8	4.3	4.1	4.1	4.0
Luxembourg	3.2	3.1	3.1	3.2	3.7	3.6	3.7	3.7
Virgin Islands, British	1.3	1.1	1.1	1.1	1.0	1.0	1.0	1.0
Bermuda	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0
United Kingdom	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9
Other	3.1	3.7	3.7	3.6	3.6	4.1	5.0	5.0
	•	Quali	fying He	dge Fund	ls			
Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Cayman Islands	51.4	52.4	52.5	53.2	53.4	52.7	51.6	51.7
United States	35.1	34.9	35.1	34.6	34.1	35.0	34.0	33.9
Ireland	3.1	2.9	3.1	3.1	3.2	3.1	3.2	3.2
Virgin Islands, British	3.6	3.2	3.0	2.9	2.8	2.8	2.7	2.7
Luxembourg	2.7	2.6	2.5	2.6	2.7	2.6	2.5	2.6
Bermuda	2.1	2.2	2.0	1.9	1.8	1.7	1.6	1.5
Other	1.9	1.7	1.8	1.8	2.0	2.1	4.3	4.5
		Section	n 3 Liqui	idity Fun	ds			
Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Ireland	***	***	***	***	***	***	***	***
United States	22.1	25.1	24.1	22.9	25.5	28.0	27.8	26.6
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***
	1	Section 4	Private	Equity F	unds			
Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
United States	56.2	55.0	55.1	55.1	56.3	55.2	55.2	55.2
Cayman Islands	32.0	31.4	31.3	31.3	29.6	29.0	28.9	28.9
Canada	1.7	1.8	1.8	1.8	2.2	2.2	2.2	2.2
United Kingdom	1.9	1.7	1.7	1.7	1.5	1.5	1.5	1.5
Bermuda	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1
Other	7.2	9.1	9.1	9.1	9.3	11.0	11.1	11.1

**Table 12:** Adviser Main Office Location (Percent of NAV) As reported on Form PF, Question 9 and Form ADV.

			All Priva	ate Fund	S						
Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3			
United States	89.8	90.1	90.1	90.0	90.4	90.3	89.4	89.6			
United Kingdom	5.5	5.4	5.3	5.4	4.6	4.8	4.8	4.6			
Other	4.7	4.5	4.6	4.6	4.9	4.9	5.9	5.8			
		Qu	alifying l	Hedge Fu	ınds						
Country 2019Q4 2020Q1 2020Q2 2020Q3 2020Q4 2021Q1 2021Q2 2021Q3											
United States	88.8	89.4	89.8	89.8	88.9	89.6	87.6	88.0			
United Kingdom	5.5	5.0	4.5	4.4	4.7	4.4	4.3	4.1			
Australia	***	***	***	***	***	***	***	***			
Hong Kong	***	***	***	***	***	***	***	***			
Other	2.1	2.1	2.0	1.9	2.0	1.8	4.0	4.1			
		Sec	tion 3 Lic	quidity F	unds						
Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3			
United States	***	***	***	***	***	***	***	***			
United Kingdom	***	***	***	***	***	***	***	***			
		Section	n 4 Priva	te Equity	y Funds						
Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3			
United States	93.8	93.8	93.8	93.8	94.2	94.3	94.3	94.3			
Canada	***	***	***	***	***	***	***	***			
Other	***	***	***	***	***	***	***	***			

#### Beneficial Ownership $\mathbf{IV}$

#### All Private Funds

**Table 13:** Beneficial Ownership for All Private Funds (\$ Billions) As reported on Form PF, Questions 9 and 16.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Funds	1,677	1,644	1,674	1,713	2,041	2,073	2,128	2,131
Other	1,469	1,455	1,511	1,563	1,823	1,856	1,943	1,922
State/Muni. Govt. Pension Plans	1,336	1,301	1,331	1,343	1,534	1,557	1,576	1,586
Pension Plans	1,169	1,106	1,142	1,164	1,248	1,266	1,278	1,263
Non-Profits	995	931	992	1,018	1,142	1,170	1,208	1,214
U.S. Individuals	958	914	966	999	1,164	1,196	1,226	1,207
Sov. Wealth Funds And For. Official Inst.	658	648	670	690	803	844	855	856
Insurance Companies	461	462	470	476	553	566	583	593
Non-U.S. Individuals	234	231	248	258	296	310	387	384
Unknown Non-U.S. Investors	243	231	238	260	277	269	263	266
State/Muni. Govt. Entities	174	169	173	175	192	199	205	203
Banking/Thrift Inst.	183	175	173	172	169	176	190	189
Sec-Registered Investment Companies	137	127	130	129	134	143	144	138
Broker-Dealers	114	106	112	115	111	110	110	44

Table 14: Beneficial Ownership for All Private Funds  $\begin{array}{c} \text{(Percent of Aggregate NAV)} \\ \text{As reported on Form PF, Questions 9 and 16.} \end{array}$ 

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Funds	17.1	17.3	17.0	17.0	17.8	17.7	17.6	17.8
Other	15.0	15.3	15.4	15.5	15.9	15.8	16.1	16.0
State/Muni. Govt. Pension Plans	13.6	13.7	13.5	13.3	13.3	13.3	13.0	13.2
Pension Plans	11.9	11.6	11.6	11.5	10.9	10.8	10.6	10.5
Non-Profits	10.1	9.8	10.1	10.1	9.9	10.0	10.0	10.1
U.S. Individuals	9.8	9.6	9.8	9.9	10.1	10.2	10.1	10.1
Sov. Wealth Funds And For. Official Inst.	6.7	6.8	6.8	6.8	7.0	7.2	7.1	7.1
Insurance Companies	4.7	4.9	4.8	4.7	4.8	4.8	4.8	4.9
Non-U.S. Individuals	2.4	2.4	2.5	2.6	2.6	2.6	3.2	3.2
Unknown Non-U.S. Investors	2.5	2.4	2.4	2.6	2.4	2.3	2.2	2.2
State/Muni. Govt. Entities	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
Banking/Thrift Inst.	1.9	1.8	1.8	1.7	1.5	1.5	1.6	1.6
Sec-Registered Investment Companies	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.2
Broker-Dealers	1.2	1.1	1.1	1.1	1.0	0.9	0.9	0.4

## B Qualifying Hedge Funds

**Table 15:** Beneficial Ownership for Qualifying Hedge Funds (\$ Billions) As reported on Form PF, Questions 9 and 16.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Funds	532	492	532	564	607	643	696	725
Non-Profits	464	410	470	494	539	561	594	601
Other	427	393	428	466	493	523	573	596
U.S. Individuals	351	316	362	384	415	454	486	491
Pension Plans	433	376	409	429	458	468	479	478
State/Muni. Govt. Pension Plans	371	331	356	368	399	411	430	447
Sov. Wealth Funds And For. Official Inst.	209	191	205	220	227	237	244	256
Non-U.S. Individuals	84	76	91	99	111	113	186	185
Insurance Companies	92	89	96	101	113	122	131	140
Unknown Non-U.S. Investors	63	54	56	60	67	63	80	89
State/Muni. Govt. Entities	49	45	50	50	53	56	62	59
Sec-Registered Investment Companies	43	35	45	46	38	41	42	42
Banking/Thrift Inst.	38	35	34	37	38	40	43	42
Broker-Dealers	81	73	78	80	17	5	6	8

Table 16: Beneficial Ownership for Qualifying Hedge Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Funds	16.4	16.9	16.5	16.6	17.0	17.2	17.2	17.4
Non-Profits	14.3	14.1	14.6	14.5	15.1	15.0	14.7	14.5
Other	13.2	13.5	13.3	13.7	13.8	14.0	14.1	14.3
U.S. Individuals	10.8	10.8	11.3	11.3	11.6	12.1	12.0	11.8
Pension Plans	13.4	12.9	12.7	12.6	12.8	12.5	11.8	11.5
State/Muni. Govt. Pension Plans	11.5	11.3	11.1	10.8	11.2	11.0	10.6	10.7
Sov. Wealth Funds And For. Official Inst.	6.5	6.6	6.4	6.5	6.3	6.3	6.0	6.1
Non-U.S. Individuals	2.6	2.6	2.8	2.9	3.1	3.0	4.6	4.4
Insurance Companies	2.8	3.0	3.0	3.0	3.2	3.3	3.2	3.4
Unknown Non-U.S. Investors	1.9	1.8	1.8	1.8	1.9	1.7	2.0	2.1
State/Muni. Govt. Entities	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4
Sec-Registered Investment Companies	1.3	1.2	1.4	1.3	1.1	1.1	1.0	1.0
Banking/Thrift Inst.	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.0
Broker-Dealers	2.5	2.5	2.4	2.3	0.5	0.1	0.2	0.2

## C Section 3 Liquidity Funds

**Table 17:** Beneficial Ownership for Section 3 Liquidity Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Other	74	76	92	93	89	83	105	101
Unknown Non-U.S. Investors	63	61	59	77	81	73	57	50
Private Funds	62	72	57	55	59	55	52	50
Sec-Registered Investment Companies	14	12	17	18	20	24	25	27
Banking/Thrift Inst.	***	***	***	11	***	***	24	***
Broker-Dealers	***	***	***	***	***	***	***	***
Insurance Companies	8	10	11	10	10	11	11	9
Pension Plans	4	***	***	5	9	7	8	7
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	2	2	2	2	3	3	3	3
Non-U.S. Individuals	4	4	3	3	***	***	4	3
State/Muni. Govt. Pension Plans	***	***	***	1	1	1	1	1
U.S. Individuals	***	***	***	***	***	***	***	***

Table 18: Beneficial Ownership for Section 3 Liquidity Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Other	25.8	26.2	30.7	29.1	27.8	27.4	33.1	33.8
Unknown Non-U.S. Investors	21.8	21.0	19.8	24.0	25.2	24.1	18.0	16.7
Private Funds	21.5	24.8	18.9	17.2	18.4	18.1	16.5	16.5
Sec-Registered Investment Companies	4.7	4.3	5.6	5.6	6.3	7.9	7.8	8.9
Banking/Thrift Inst.	***	***	***	3.5	***	***	7.4	***
Broker-Dealers	***	***	***	***	***	***	***	***
Insurance Companies	2.9	3.5	3.8	3.2	3.1	3.6	3.5	3.2
Pension Plans	1.3	***	***	1.5	2.7	2.3	2.4	2.4
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	0.8	0.6	0.6	0.8	0.8	1.0	1.0	1.1
Non-U.S. Individuals	1.3	1.5	0.9	0.8	***	***	1.1	0.9
State/Muni. Govt. Pension Plans	***	***	***	0.3	0.4	0.3	0.3	0.4
U.S. Individuals	***	***	***	***	***	***	***	***

#### D Section 4 Private Equity Funds

**Table 19:** Beneficial Ownership for Section 4 Private Equity Funds (\$ Billions) As reported on Form PF, Questions 9 and 16.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Funds	467	468	468	468	656	659	662	662
State/Muni. Govt. Pension Plans	514	526	526	526	652	654	655	655
Other	369	392	392	392	513	544	544	544
Sov. Wealth Funds And For. Official Inst.	278	286	285	285	361	387	388	388
Pension Plans	199	201	201	201	246	246	247	247
Insurance Companies	152	154	154	154	189	190	190	190
U.S. Individuals	132	132	132	132	186	187	187	187
Non-Profits	139	140	140	140	180	180	180	180
Non-U.S. Individuals	51	54	54	54	65	71	71	71
State/Muni. Govt. Entities	56	56	56	56	63	63	63	63
Banking/Thrift Inst.	36	37	37	37	38	38	38	38
Sec-Registered Investment Companies	28	28	28	28	27	27	27	27
Unknown Non-U.S. Investors	19	19	19	19	25	25	25	25
Broker-Dealers	1	1	1	1	3	3	3	3

**Table 20:** Beneficial Ownership for Section 4 Private Equity Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Funds	19.1	18.8	18.8	18.8	20.5	20.1	20.2	20.2
State/Muni. Govt. Pension Plans	21.1	21.1	21.1	21.1	20.3	20.0	20.0	20.0
Other	15.1	15.7	15.7	15.7	16.0	16.6	16.6	16.6
Sov. Wealth Funds And For. Official Inst.	11.4	11.5	11.4	11.4	11.3	11.8	11.8	11.8
Pension Plans	8.2	8.1	8.1	8.1	7.7	7.5	7.5	7.5
Insurance Companies	6.2	6.2	6.2	6.2	5.9	5.8	5.8	5.8
U.S. Individuals	5.4	5.3	5.3	5.3	5.8	5.7	5.7	5.7
Non-Profits	5.7	5.6	5.6	5.6	5.6	5.5	5.5	5.5
Non-U.S. Individuals	2.1	2.2	2.2	2.2	2.0	2.2	2.2	2.2
State/Muni. Govt. Entities	2.3	2.3	2.3	2.3	2.0	1.9	1.9	1.9
Banking/Thrift Inst.	1.5	1.5	1.5	1.5	1.2	1.2	1.2	1.2
Sec-Registered Investment Companies	1.1	1.1	1.1	1.1	0.8	0.8	0.8	0.8
Unknown Non-U.S. Investors	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Broker-Dealers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

## E Concentration

**Table 21:** Weighted-Average Beneficial Ownership of Top 5 Owners (Percent) As reported on Form PF, Questions 9 and 15.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Private Equity Fund	50.5	50.5	50.5	50.5	50.2	51.1	51.1	51.1
Section 4 Private Equity Fund	45.0	45.0	44.9	44.9	45.2	46.1	46.2	46.2
Venture Capital Fund	54.7	54.7	54.8	54.7	53.8	53.7	53.9	53.9
Other Private Fund	58.6	59.0	59.1	58.4	59.6	59.4	59.4	60.2
Hedge Fund	55.9	55.5	55.3	55.4	55.4	55.2	54.2	54.0
Qualifying Hedge Fund	51.2	50.5	50.4	50.5	50.7	50.5	49.7	49.9
Liquidity Fund	45.6	49.3	46.3	44.2	43.8	45.4	47.4	46.3
Section 3 Liquidity Fund	44.6	48.2	45.9	43.8	43.6	45.2	47.1	46.0
Real Estate Fund	56.7	56.6	56.6	56.6	56.2	56.2	56.1	56.1
Securitized Asset Fund	39.4	39.4	39.5	39.1	37.5	36.2	35.9	35.8
Total	53.8	53.7	53.6	53.5	53.3	53.6	53.3	53.2

## **Derivatives**

**Table 22:** Aggregate Derivative Value (\$ Billions) As reported on Form PF, Questions 13 and 44 (Third Month).

The "Total" row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

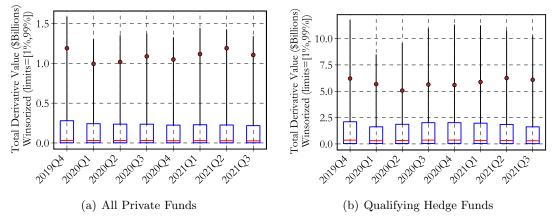
Туре	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Hedge Fund	12,771	11,977	11,057	13,752	14,161	15,237	16,306	15,883
Qualifying Hedge Fund	11,168	10,540	9,544	11,771	11,893	13,460	14,415	$14,\!474$
Other Private Fund	111	108	108	106	134	138	134	133
Private Equity Fund	95	96	96	97	66	66	66	66
Section 4 Private Equity Fund	37	37	37	37	34	34	34	34
Real Estate Fund	18	18	18	18	19	18	18	18
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	3	3	3	3	3	3	3	3
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	12,915	12,221	11,318	14,003	14,475	15,505	16,554	16,089

**Table 23:** Aggregate Derivative Value (Percent of Aggregate NAV) As reported on Form PF, Questions 9, 13, and 44 (Third Month).

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Hedge Fund	308.8	316.7	270.2	319.8	303.6	316.6	317.7	310.8
Qualifying Hedge Fund	344.9	361.3	296.9	346.1	332.8	359.9	355.3	347.8
Other Private Fund	9.0	9.0	8.9	8.6	10.3	10.5	10.0	10.4
Private Equity Fund	2.9	2.9	2.9	2.9	1.6	1.5	1.6	1.6
Section 4 Private Equity Fund	1.5	1.5	1.5	1.5	1.1	1.0	1.0	1.0
Real Estate Fund	3.6	3.6	3.6	3.6	3.1	2.9	2.9	2.9
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	1.5	1.5	1.5	1.5	1.3	1.3	1.3	1.3
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	131.6	128.6	115.1	138.9	126.0	132.1	136.8	134.1

Figure 6: Distribution of Derivative Values

See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Questions 13 and 44 (Third Month).



## VI Additional Hedge Fund Industry Information

#### A High Frequency Trading

**Table 24:** Number of Hedge Funds Using High Frequency Trading (HFT) Strategies

As reported on Form PF, Question 21.

Fraction of NAV	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
0%	7,973	8,057	8,070	8,133	8,151	8,201	8,309	8,208
Less than $100\%$	51	50	51	49	46	45	49	49
100% or More	10	9	8	7	6	6	6	6

**Table 25:** Hedge Fund Assets Managed Using HFT Strategies (\$ Billions) As reported on Form PF, Questions 9 and 21.

Fraction of NAV	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
0%	4,038	3,678	3,969	4,175	4,534	4,675	4,989	4,958
Less than $100\%$	81	84	95	99	99	103	112	117
100% or More	3	2	2	2	3	4	4	5

#### **B** Industry Concentration

**Table 26:** Percent of Aggregate Hedge Fund Net Asset Value Reported by Top Hedge Funds Sorted by Net Asset Value As reported on Form PF, Questions 9 and 10.

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Top 10	7.4	7.5	7.5	7.5	7.1	7.1	7.0	7.3
Top $25$	13.6	14.0	14.0	14.0	13.5	13.3	13.0	13.3
Top $50$	19.6	20.1	20.1	20.4	19.9	19.5	19.1	19.4
Top 100	27.7	28.1	28.2	28.7	28.3	27.8	27.5	27.9
Top $250$	42.1	42.3	42.7	43.4	43.0	42.6	42.2	42.7
Top 500	55.5	55.5	56.1	56.7	56.4	56.1	55.9	56.2

**Table 27:** Percent of Aggregate Hedge Fund Gross Asset Value Reported by Top Hedge Funds Sorted by Gross Asset Value As reported on Form PF, Questions 8 and 10.

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Top 10	15.3	17.0	14.8	15.3	14.9	14.1	14.8	16.2
Top $25$	24.5	25.9	23.8	24.6	23.7	22.8	23.7	25.2
Top $50$	33.2	34.5	32.4	33.3	32.5	31.5	32.2	33.5
Top 100	42.3	43.5	41.6	42.4	41.5	40.4	40.7	42.3
Top $250$	55.7	56.5	55.1	56.0	55.3	54.1	54.1	55.4
Top 500	67.0	67.5	66.5	67.2	66.5	65.8	65.7	66.8

**Table 28:** Percent of Aggregate Hedge Fund Borrowings Reported by Top Hedge Funds Sorted by Borrowings As reported on Form PF, Questions 12 and 43 (Month 3).

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Top 10	35.5	38.5	35.0	34.6	33.4	32.4	31.7	32.2
Top $25$	50.5	52.5	50.3	51.0	48.8	47.1	47.5	48.0
Top $50$	62.2	63.5	62.5	62.7	61.0	59.7	60.2	60.5
Top 100	72.9	73.5	73.5	73.9	72.2	71.0	70.7	71.1
Top $250$	84.5	84.3	84.4	84.9	84.1	83.1	83.0	83.2
Top $500$	91.6	91.0	91.4	91.8	91.3	90.7	90.8	90.9

**Table 29:** Percent of Aggregate Hedge Fund Derivative Value Reported by Top Hedge Funds Sorted by Derivative Value As reported on Form PF, Questions 13 and 44 (Month 3).

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Top 10	28.9	34.0	32.6	39.2	40.7	41.4	39.4	40.7
Top $25$	47.3	52.3	48.8	53.8	55.1	56.3	54.9	56.8
Top $50$	60.1	65.0	61.5	66.1	66.8	67.6	67.1	69.2
Top 100	72.1	76.2	73.3	76.6	77.0	77.9	78.1	79.5
Top $250$	86.5	88.1	87.2	89.0	89.1	89.2	89.3	90.4
Top 500	93.7	94.3	93.9	94.9	94.8	94.9	95.0	95.5

**Table 30:** Percent of Aggregate Hedge Fund Gross Notional Exposure Reported by Top Hedge Funds Sorted by Gross Notional Exposure As reported on Form PF, Questions 26 and 30 (Month 3).

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Top 10	29.1	33.2	31.9	35.7	35.6	36.6	34.8	35.0
Top $25$	46.3	50.8	48.1	50.6	49.2	50.1	48.4	49.6
Top $50$	58.5	62.1	59.3	61.4	60.2	60.5	59.4	60.7
Top 100	70.1	72.5	70.2	71.7	70.8	71.2	70.0	70.9
Top $250$	83.3	84.6	83.0	84.1	83.4	83.4	82.8	83.4
Top 500	91.6	92.2	91.3	92.0	91.7	91.3	90.9	91.2

## C Single-Strategy US-Domiciled Hedge Funds

**Table 31:** Exposures of Single-Strategy US-Domiciled Hedge Funds (\$ Billions) As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	562	485	547	567	615	642	666	653
	Long Bias	276	235	269	282	318	329	327	319
Equity	Long/Short	245	207	239	251	266	288	309	306
	Market Neutral	40	40	38	33	30	25	28	27
	Short Bias	2	2	2	1	1	1	1	1
Other	Subtotal	473	441	481	490	537	561	589	595
	Subtotal	98	96	98	103	119	122	126	134
Credit	Long/Short	50	48	52	56	63	67	68	72
	Asset Based Lending	47	48	46	47	56	55	57	62
	Subtotal	45	43	47	47	51	56	61	66
Event Driven	Distressed/Restruct.	30	31	32	31	34	37	41	47
Event Driven	Equity	10	8	11	11	12	12	14	13
	Risk Arb./Merger Arb.	5	4	4	5	5	6	6	6
	Subtotal	43	40	43	48	48	49	48	49
	F.I. Asset Backed	27	27	27	29	28	29	28	30
Relative Value	F.I. Corp.	8	7	8	9	11	9	9	9
Relative value	F.I. Conv. Arb.	5	3	5	7	7	8	8	7
	F.I. Sov.	***	***	1	1	2	1	1	1
	Volatility Arb.	***	***	1	1	1	1	1	1
Investment in other funds	Subtotal	31	36	30	31	29	31	32	32
	Subtotal	15	11	11	12	11	13	13	13
	Global Macro	12	9	8	9	8	10	9	10
Macro	Commodity	1	2	2	2	***	***	***	3
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
	Subtotal	5	5	5	5			$   \overline{6}$	
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Total	Total	1,089	1,002	1,095	1,140	1,251	1,314	1,369	1,383

**Table 32:** Number of Single-Strategy US-Domiciled Hedge Funds As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	1,013	1,007	993	1,017	1,013	1,024	1,031	1,035
	Long Bias	521	511	504	522	525	534	528	527
Equity	Long/Short	434	438	433	443	437	441	450	457
	Market Neutral	48	47	45	45	48	46	47	46
	Short Bias	17	18	18	17	11	11	11	11
Other	Subtotal	924	931	943	957	950	979	1,003	1,018
	Subtotal	297	303	313	318	354	357	366	373
Credit	Long/Short	155	159	165	168	173	175	176	178
	Asset Based Lending	146	147	151	153	184	185	193	198
	Subtotal	215	220	227	220	217	230	239	236
Event Driven	Distressed/Restruct.	153	159	165	156	151	161	165	166
Event Driven	Equity	47	45	45	46	50	52	56	52
	Risk Arb./Merger Arb.	23	23	24	23	21	21	22	21
	Subtotal	151	149	160	172	174	177	173	173
	F.I. Asset Backed	72	69	81	88	93	95	95	96
Relative Value	F.I. Corp.	48	47	49	53	53	50	44	47
Relative value	F.I. Conv. Arb.	16	17	16	17	18	18	19	18
	F.I. Sov.	***	***	11	16	16	17	16	15
	Volatility Arb.	***	***	12	12	14	13	12	11
Investment in other funds	Subtotal	211	215	213	219	238	239	233	238
	Subtotal	44	45	44	44	44	-46	-46	43
	Global Macro	24	24	22	21	24	24	24	22
Macro	Commodity	9	14	13	13	***	***	***	13
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
	Subtotal	26	27	27	28	26	27	27	$\frac{1}{24}$
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
,	Fundamental	***	***	***	***	***	***	***	***
Total	Total	2,687	2,721	2,746	2,775	2,788	2,852	2,907	2,930

## D Single-Strategy Non-US-Domiciled Hedge Funds

**Table 33:** Exposures of Single-Strategy Non-US-Domiciled Hedge Funds (\$ Billions) As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	907	779	902	994	1,179	1,160	1,279	1,275
	Long/Short	601	512	608	670	803	779	830	825
Equity	Long Bias	211	190	224	249	293	296	357	360
	Market Neutral	***	***	***	***	***	***	***	***
	Short Bias	***	***	***	***	***	***	***	***
	Subtotal	359	390	377	375	408	410	423	445
	F.I. Sov.	224	248	256	252	272	274	283	299
Relative Value	F.I. Asset Backed	88	99	74	76	79	80	78	79
Relative value	F.I. Corp.	19	18	24	24	29	24	27	28
	Volatility Arb.	17	16	12	12	14	17	19	22
	F.I. Conv. Arb.	10	9	11	11	13	15	16	17
	Subtotal	357	353	343	434	379	379	404	385
	Global Macro	346	344	332	425	368	369	392	373
Macro	Commodity	8	6	6	6	7	7	9	8
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
Other	Subtotal	560	529	538	565	616	655	744	755
	Subtotal	202	206	212	220	235	248	304	326
Credit	Long/Short	153	150	152	155	175	186	238	229
	Asset Based Lending	49	56	61	65	61	62	66	96
	Subtotal	$17\bar{2}$	153	110	132	151	167	201	233
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
	Subtotal	121	111	117	136	147	168	182	178
E D	Distressed/Restruct.	81	72	81	93	95	103	110	112
Event Driven	Risk Arb./Merger Arb.	18	21	17	22	28	35	41	33
	Equity	21	18	19	21	24	29	31	33
Investment in other funds	Subtotal	30	28	29	28	30	35	34	35
Total	Total	1,805	1,653	1,820	1,938	2,159	2,208	2,418	2,463

**Table 34:** Number of Single-Strategy Non-US-Domiciled Hedge Funds As reported on Form PF, Questions 9, 19, and 20.

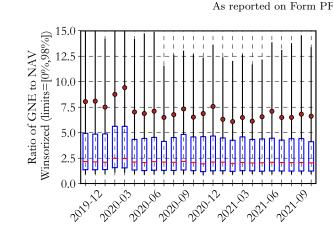
Category	Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	1,055	1,059	1,029	1,030	1,075	1,050	1,082	1,070
	Long/Short	623	632	620	618	636	609	610	605
Equity	Long Bias	317	317	312	315	342	342	375	379
	Market Neutral	***	***	***	***	***	***	***	***
	Short Bias	***	***	***	***	***	***	***	***
	Subtotal	296	303	300	297	306	305	308	305
	F.I. Sov.	57	56	58	57	60	57	55	54
Relative Value	F.I. Asset Backed	130	129	134	138	151	149	151	147
Itelative value	F.I. Corp.	91	97	97	94	94	92	99	99
	Volatility Arb.	34	34	28	26	26	26	25	25
	F.I. Conv. Arb.	28	27	27	26	24	27	25	27
	Subtotal	216	216	209	213	213	213	212	207
	Global Macro	161	163	158	163	163	163	162	160
Macro	Commodity	44	44	40	41	38	40	38	34
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
Other	Subtotal	790	828	811	808	839	823	878	853
	Subtotal	334	333	340	345	343	343	359	357
Credit	Long/Short	241	237	244	246	244	243	255	250
	Asset Based Lending	95	99	99	101	102	103	107	111
	Subtotal	122	132	124	121	115	118	120	123
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
	Subtotal	285	295	300	306	305	313	318	321
Event Driven	Distressed/Restruct.	195	206	215	223	214	218	220	223
Event Driven	Risk Arb./Merger Arb.	52	47	44	43	43	43	48	47
	Equity	75	78	74	72	77	82	80	79
Investment in other funds	Subtotal	130	127	130	126	113	130	104	102
Total	Total	3,029	3,078	3,047	3,066	3,119	3,101	3,178	3,128

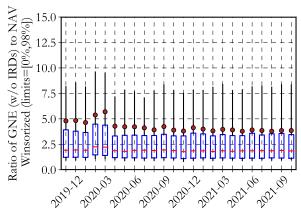
## VII Information Reported by Large Hedge Fund Advisers

#### A Economic Leverage

**Figure 7:** Ratio of Hedge Fund Gross Notional Exposure to Net Asset Value See Appendix C and Appendix D for an explanation of boxplots and winsorization.

As reported on Form PF, Questions 3(a) and 26.





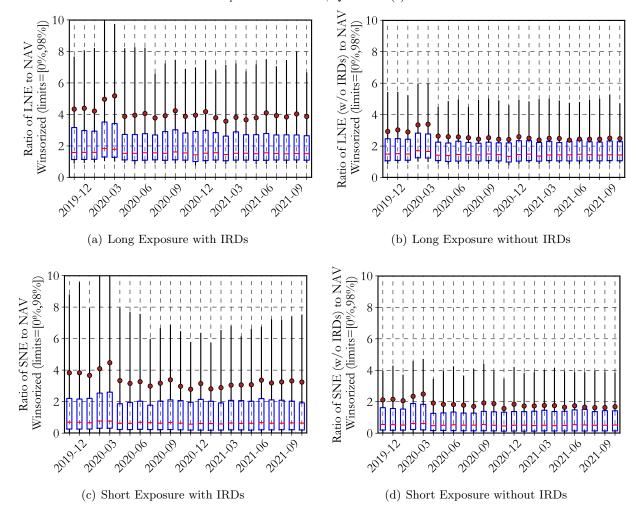
(a) Gross Exposure with Interest Rate Derivatives (IRDs)

(b) Gross Exposure without IRDs

Figure 8: Ratio of Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value Distribution

See Appendix C and Appendix D for an explanation of boxplots and winsorization.

As reported on Form PF, Questions 3(a) and 26.



## B Industry Concentration

**Table 35:** Large Hedge Fund Adviser Asset and Exposure Concentration (Percent of Total Reported)

As reported on Form PF, Questions 3(a) and 26.

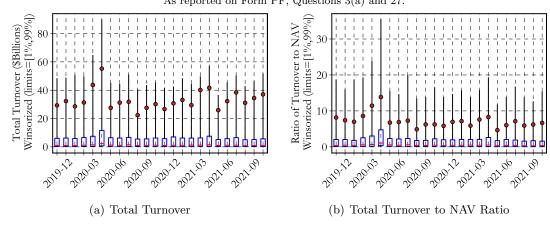
Month	Top 10 Advisers (NAV)	Top 20 Advisers (NAV)	Top 10 Advisers (GNE)	Top 20 Advisers (GNE)
2019-10	19.5	29.3	37.6	54.0
2019-11	19.5	29.3	37.3	54.0
2019-12	19.5	29.3	36.9	53.5
2020 - 01	19.1	29.6	37.9	55.2
2020 - 02	19.1	29.6	38.6	55.8
2020 - 03	19.1	29.6	40.9	56.5
2020 - 04	18.3	29.0	40.6	56.6
2020 - 05	18.3	29.0	40.4	56.0
2020 - 06	18.3	29.0	39.7	55.5
2020 - 07	18.4	29.1	42.0	57.1
2020 - 08	18.4	29.1	40.5	56.5
2020-09	18.5	29.3	40.2	55.9
2020 - 10	16.8	26.4	39.8	55.6
2020 - 11	16.8	26.4	39.1	56.1
2020 - 12	16.8	26.4	39.2	54.4
2021-01	16.2	26.2	40.2	55.7
2021-02	16.2	26.2	42.1	57.4
2021-03	16.2	26.2	41.3	55.8
2021-04	16.3	26.5	40.6	55.4
2021-05	16.3	26.4	40.4	55.6
2021-06	16.3	26.4	40.0	54.6
2021-07	16.3	26.6	40.6	56.7
2021-08	17.0	27.5	39.2	56.2
2021-09	17.0	27.5	38.8	55.6

#### C Portfolio Turnover

**Table 36:** Aggregate Portfolio Turnover (\$ Billions) As reported on Form PF, Question 27.

Month	Futures	Sov. and muni. bonds	Listed equities	Corporate bonds	Convertible bonds	Total
2019-10	12,752	3,679	2,566	152	19	19,168
2019-11	14,105	3,877	2,280	134	27	20,422
2019-12	13,352	3,367	2,302	95	21	19,137
2020-01	13,069	3,799	2,719	176	36	19,798
2020-02	19,150	4,625	2,916	167	31	26,890
2020-03	25,073	6,465	4,071	230	36	$35,\!875$
2020 - 04	9,351	4,464	2,658	226	39	16,738
2020 - 05	12,203	4,189	2,677	211	44	19,324
2020-06	12,862	4,038	3,201	220	51	20,372
2020-07	7,968	3,345	2,928	164	40	14,444
2020-08	10,052	3,829	2,552	165	39	16,638
2020-09	11,043	3,738	2,866	207	38	$17,\!891$
2020-10	9,346	4,159	2,756	189	44	16,493
2020 - 11	12,519	4,665	3,227	171	55	20,637
2020 - 12	17,703	4,408	2,993	125	56	$25,\!285$
2021-01	10,690	4,430	3,454	176	58	18,807
2021-02	17,637	5,568	3,460	176	63	26,904
2021-03	18,604	5,505	4,131	189	63	28,491
2021-04	9,445	4,030	3,210	173	51	16,910
2021-05	13,934	4,419	3,376	157	44	21,929
2021-06	16,641	5,182	3,678	151	48	25,701
2021-07	12,043	5,110	3,157	142	29	20,481
2021-08	13,973	5,438	3,100	140	39	22,690
2021-09	16,020	5,485	3,437	168	54	25,164

Figure 9: Distributions of Portfolio Turnover See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Questions 3(a) and 27.



#### D Region and Country Exposure

**Table 37:** Large Hedge Fund Adviser Hedge Fund Region Exposure (\$ Billions)
As reported on Form PF, Questions 3(a) and 28.

Region	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
North America	5,410	4,940	4,943	5,422	5,096	5,275	5,586	5,848
Europe EEA	1,619	1,443	1,419	1,639	1,533	1,353	1,491	1,595
Asia	770	658	674	815	803	782	816	800
Europe Other	85	93	94	126	107	291	313	314
South America	122	87	86	98	93	85	91	87
Supranational	54	42	54	35	33	45	47	47
Africa	33	30	37	40	40	34	38	33
Middle East	29	40	28	35	29	29	55	31

**Table 38:** Large Hedge Fund Adviser Hedge Fund Region Exposure (Percent of Aggregate NAV)

As reported on Form PF, Questions 3(a) and 28.

Region	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
North America	151.8	151.8	138.8	143.4	129.8	127.9	127.7	128.7
Europe EEA	45.5	44.4	39.9	43.3	39.0	32.8	34.1	35.1
Asia	21.6	20.2	18.9	21.6	20.5	19.0	18.7	17.6
Europe Other	2.4	2.8	2.6	3.3	2.7	7.1	7.2	6.9
South America	3.4	2.7	2.4	2.6	2.4	2.1	2.1	1.9
Supranational	1.5	1.3	1.5	0.9	0.8	1.1	1.1	1.0
Africa	0.9	0.9	1.0	1.1	1.0	0.8	0.9	0.7
Middle East	0.8	1.2	0.8	0.9	0.7	0.7	1.3	0.7

**Table 39:** Large Hedge Fund Adviser Hedge Fund Country Exposure (\$ Billions)
As reported on Form PF, Questions 3(a) and 28.

Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
United States	5,074	4,716	4,721	5,159	4,858	5,018	5,287	5,478
China (Inc. Hong Kong)	199	181	221	271	285	280	284	251
Japan	264	221	191	214	215	209	219	233
India	37	29	30	32	36	46	52	53
Brazil	50	32	33	36	38	33	43	33
Russia	15	15	17	17	18	16	18	16

**Table 40:** Large Hedge Fund Adviser Hedge Fund Country Exposure (Percent of Aggregate NAV)

As reported on Form PF, Questions 3(a) and 28.

Country	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
United States	142.4	144.9	132.6	136.4	123.7	121.6	120.9	120.5
China (Inc. Hong Kong)	5.6	5.6	6.2	7.2	7.3	6.8	6.5	5.5
Japan	7.4	6.8	5.4	5.7	5.5	5.1	5.0	5.1
India	1.0	0.9	0.8	0.9	0.9	1.1	1.2	1.2
Brazil	1.4	1.0	0.9	1.0	1.0	0.8	1.0	0.7
Russia	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.3

## VIII Qualifying Hedge Fund Specific Information

#### A Economic Leverage

**Figure 10:** Ratio of Qualifying Hedge Fund Gross Notional Exposure to Net Asset Value See Appendix C and Appendix D for an explanation of boxplots and winsorization.

As reported on Form PF, Questions 9, 10, 26, and 30.

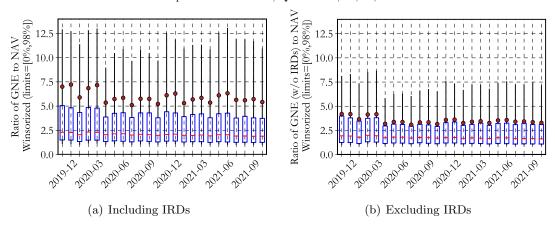
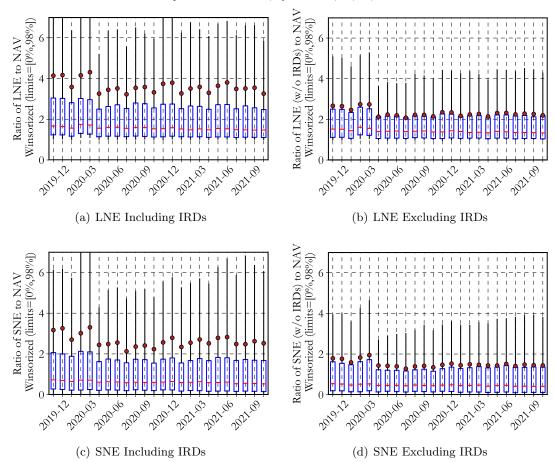


Figure 11: Ratio of Qualifying Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value

See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Questions 9, 10, 26, and 30.



# B Gross Exposure by Strategy<sup>5</sup>

**Table 41:** Exposures of Hedge Funds (\$ Billions) As reported on Form PF, Questions 9 and 20.

Category	Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	1,723	1,379	1,641	1,757	1,975	2,036	2,243	2,228
	Long/Short	880	713	867	957	1,090	1,114	1,204	1,200
Equity	Long Bias	443	373	443	485	548	574	649	649
	Market Neutral	397	***	329	***	***	***	390	***
	Short Bias	3	***	1	***	***	***	0	***
Other	Subtotal	1,134	1,106	1,126	1,128	1,189	1,247	1,365	1,422
	Subtotal	1,030	1,106	983	1,023	997	981	1,031	1,035
	F.I. Sov.	714	836	700	689	676	647	692	691
Relative Value	F.I. Conv. Arb.	60	55	80	101	121	129	133	126
Relative value	F.I. Asset Backed	177	129	116	135	112	103	95	100
	F.I. Corp.	61	53	62	72	56	58	63	61
	Volatility Arb.	18	32	26	26	32	43	48	57
	Subtotal	666	644	641	797	746	741	818	893
	Global Macro	579	577	572	725	681	670	740	790
Macro	Commodity	39	28	25	28	31	34	44	66
	Currency	44	36	***	40	30	***	***	34
	Active Trading	5	4	***	4	4	***	***	4
	Subtotal	315	327	358	370	393	415	448	453
Credit	Long/Short	233	240	265	272	295	317	346	348
	Asset Based Lending	82	87	93	98	98	98	102	105
	Subtotal	311	271	281	307	366	408	$45\bar{2}$	449
Event Driven	Distressed/Restruct.	163	140	159	162	169	180	186	202
Event Driven	Equity	79	65	64	71	96	116	138	141
	Risk Arb./Merger Arb.	69	65	59	74	101	111	129	107
	- Subtotal	193	159	126	149	165	169	215	246
Managed Futures/CTA	Quantitative	***	158	***	145	***	***	***	***
	Fundamental	***	1	***	4	***	***	***	***
Investment in other funds	Subtotal	48	50	42	43	43	51	54	57
Total	Total	5,420	5,041	5,198	5,574	5,873	6,048	6,626	6,783

<sup>&</sup>lt;sup>5</sup>Form PF Question 20 requires advisers to indicate which strategies best describe the reporting fund's strategies including a good faith estimate of the reporting fund's allocation among strategies, and provides a list of investment strategies for this purpose. Form PF does not define the investment strategies listed by Question 20.

 $\begin{array}{c} \textbf{Table 42:} \ \ \text{Exposures of Hedge Funds (Percent of NAV)} \\ \text{As reported on Form PF, Questions 9 and 20.} \end{array}$ 

Category	Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	53.2	47.3	51.0	51.7	55.3	54.4	55.3	53.5
	Long/Short	27.2	24.5	27.0	28.1	30.5	29.8	29.7	28.8
Equity	Long Bias	13.7	12.8	13.8	14.3	15.3	15.3	16.0	15.6
	Market Neutral	12.3	***	10.2	***	***	***	9.6	***
	Short Bias	0.1	***	0.0	***	***	***	0.0	***
Other	Subtotal	35.0	37.9	35.0	33.2	33.3	33.4	33.6	$\bar{34.2}$
	Subtotal	31.8	37.9	30.6	30.1	27.9	$26.\bar{2}$	$25.\bar{4}$	24.9
	F.I. Sov.	22.0	28.7	21.8	20.3	18.9	17.3	17.1	16.6
Relative Value	F.I. Conv. Arb.	1.8	1.9	2.5	3.0	3.4	3.5	3.3	3.0
iterative value	F.I. Asset Backed	5.5	4.4	3.6	4.0	3.1	2.8	2.3	2.4
	F.I. Corp.	1.9	1.8	1.9	2.1	1.6	1.6	1.6	1.5
	Volatility Arb.	0.6	1.1	0.8	0.8	0.9	1.2	1.2	1.4
	Subtotal	20.6	22.1	19.9	23.4	20.9	19.8	20.2	21.5
	Global Macro	17.9	19.8	17.8	21.3	19.1	17.9	18.2	19.0
Macro	Commodity	1.2	1.0	0.8	0.8	0.9	0.9	1.1	1.6
	Currency	1.3	1.2	***	1.2	0.8	***	***	0.8
	Active Trading	0.2	0.1	***	0.1	0.1	***	***	0.1
	Subtotal	9.7	11.2	11.1	10.9	11.0	11.1	11.0	10.9
Credit	Long/Short	7.2	8.2	8.2	8.0	8.3	8.5	8.5	8.4
	Asset Based Lending	2.5	3.0	2.9	2.9	2.7	2.6	2.5	2.5
	Subtotal	9.6	9.3	8.7	9.0	10.2	10.9	11.2	10.8
Event Driven	Distressed/Restruct.	5.0	4.8	4.9	4.8	4.7	4.8	4.6	4.9
Event Driven	Equity	2.5	2.2	2.0	2.1	2.7	3.1	3.4	3.4
	Risk Arb./Merger Arb.	2.1	2.2	1.8	2.2	2.8	3.0	3.2	2.6
	Subtotal	5.9	5.5	3.9	4.4	$-4.\bar{6}$	$-4.\bar{5}$	$-5.\bar{3}$	5.9
Managed Futures/CTA	Quantitative	***	5.4	***	4.3	***	***	***	***
	Fundamental	***	0.1	***	0.1	***	***	***	***
Investment in other funds	Subtotal	1.5	1.7	1.3	1.3	$1.\bar{2}$	1.4	1.3	1.4
Total	Total	167.4	172.8	161.7	163.9	164.3	161.7	163.3	163.0

# C Leverage by Strategy

**Table 43:** Asset Weighted-Average Ratio of GAV to NAV by Strategy
As reported on Form PF, Questions 8, 9, 10, and 20.

Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Relative Value	5.6	6.3	5.0	4.8	5.7	5.6	5.7	7.0
Macro	4.3	4.4	3.7	4.6	4.5	4.5	4.8	4.8
Multi-Strategy	2.3	2.3	2.0	2.5	3.0	3.1	3.2	3.3
Credit	1.6	1.7	1.6	1.5	1.5	1.5	1.6	1.5
Equity	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.5
Managed Futures/CTA	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
Other	1.7	1.7	1.6	1.5	1.5	1.4	1.4	1.5
Event Driven	1.3	1.4	1.4	1.3	1.3	1.4	1.4	1.4
Investment in other funds	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.3

Table 44: Asset Weighted-Average Ratio of GNE to NAV by Strategy
As reported on Form PF, Questions 9, 10, 20, 26, and 30 (Third Month).

Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Macro	27.6	26.7	20.2	32.5	33.1	37.3	36.9	34.6
Relative Value	24.2	25.5	22.5	19.6	23.6	24.9	23.3	26.4
Managed Futures/CTA	18.5	14.6	17.4	20.9	19.7	19.2	21.4	22.9
Multi-Strategy	11.5	10.3	9.4	10.3	12.4	14.7	16.1	16.2
Investment in other funds	1.9	1.8	2.0	2.0	2.1	1.9	2.9	3.3
Other	4.3	4.6	4.1	3.4	3.2	3.1	3.2	3.2
Credit	2.8	3.1	2.8	2.8	2.8	3.0	3.2	3.0
Equity	3.1	2.7	3.0	3.0	2.9	3.0	3.0	2.9
Event Driven	1.9	1.9	1.8	1.8	1.9	2.0	2.1	2.0

**Table 45:** Asset Weighted-Average Percent of Unencumbered Cash by Strategy
As reported on Form PF, Questions 9, 10, 20, and 33 (Third Month).

Strategy	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Managed Futures/CTA	43.4	58.6	46.1	47.7	40.4	38.7	34.0	42.7
Macro	39.7	43.2	40.1	38.2	40.2	41.9	42.9	42.3
Multi-Strategy	22.7	25.0	28.5	30.1	26.4	24.9	25.4	25.4
Relative Value	22.6	26.3	24.0	26.2	25.7	21.9	20.9	21.1
Other	14.9	16.2	16.2	13.4	12.4	12.5	12.2	11.6
Credit	7.7	8.3	7.4	7.9	9.7	9.4	8.9	8.8
Equity	9.3	15.2	10.5	8.3	7.9	8.0	7.5	8.1
Event Driven	10.4	12.3	10.0	8.0	8.5	7.5	7.2	7.7
Investment in other funds	6.6	4.7	5.1	6.0	7.2	1.1	3.0	1.6

# D Investment Exposures

**Table 46:** Aggregate Qualifying Hedge Fund Gross Notional Exposure by Asset Type (\$ Billions)

As reported on Form PF, Questions 26 and 30.

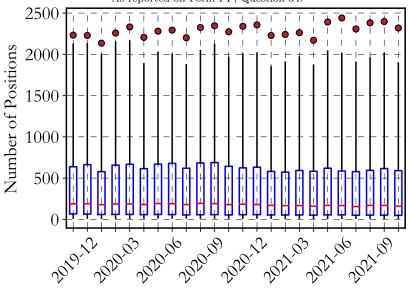
	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Interest Rate Derivatives	5,736	5,625	5,287	6,390	6,282	6,781	7,509	7,640
Foreign Exchange Derivatives	2,941	3,187	2,836	3,164	3,216	3,756	4,076	4,077
Non-Financial Listed Equities	2,141	1,551	1,945	2,142	2,495	2,551	2,836	2,711
Repurchase Agreements	1,922	2,010	1,800	2,069	1,908	1,895	2,073	2,270
U.S. Treasury Securities	2,192	1,957	1,768	1,740	1,595	1,672	1,727	1,735
Non-Financial Equity Derivatives	1,452	1,137	1,132	1,168	1,273	1,622	1,558	1,598
Sovereign Bonds - Non-U.S. G10	1,194	928	962	1,155	1,272	1,302	1,416	1,472
Credit Derivatives	659	536	488	534	586	736	715	783
Cash/Cash Equivalents - Other	464	491	409	389	425	506	576	534
Commodity Derivatives	345	227	266	309	341	367	417	455
Non-Financial Unlisted Equities	269	238	255	288	317	385	433	417
Financial Listed Equities	295	196	237	244	272	314	347	359
Sovereign Bonds - Other	291	235	275	348	327	278	321	332
Non-Financial Corporate Bonds	223	203	246	246	221	240	273	272
Non-U.S. Currency Holdings	202	172	215	180	188	208	223	255
Leveraged Loans	166	168	181	198	202	223	230	247
Cash/Cash Equivalents - Deposits	205	212	190	190	184	196	205	240
MBS	308	219	246	254	216	184	203	212
Other Derivatives	411	236	204	235	226	213	218	188
Cash/Cash Equivalents - MMFs	171	209	186	170	168	173	172	181
Non-Financial Convertible Bonds	90	86	117	140	174	182	200	178
Other Private Funds	123	113	115	123	134	145	157	175
Physical Real Estate	106	102	99	100	112	120	130	146
Other Loans (Excluding Repo)	107	100	109	117	115	118	123	133
Financial Equity Derivatives	107	83	90	88	93	99	110	105
Other	96	103	100	85	89	95	88	93
Financial Corporate Bonds	67	64	67	69	68	67	71	73
Other ABS/Structured Products	56	45	48	51	50	52	62	60
U.S. Agency and GSE Securities	43	36	35	39	42	39	43	52
CDO/CLO	42	31	35	35	33	35	37	38
Financial Unlisted Equities	24	22	22	24	26	27	30	27
U.S. State and Local Bonds	20	20	20	19	19	19	19	21
Registered Investment Companies	14	12	23	20	17	18	17	16
Financial Convertible Bonds	10	8	9	8	8	9	10	9
Physical Commodities	3	3	4	5	8	5	5	7

**Table 47:** Percent of Qualifying Hedge Fund Gross Notional Exposure
Representing Long Notional Exposure
As reported on Form PF, Questions 26 and 30.

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Interest Rate Derivatives	47.8	48.0	44.5	52.4	51.5	49.7	48.5	48.5
Foreign Exchange Derivatives	58.3	57.7	60.3	58.4	58.5	58.5	57.7	57.0
Non-Financial Listed Equities	68.7	69.8	69.0	69.7	70.7	70.9	70.2	71.4
Repurchase Agreements	36.1	37.2	38.3	38.1	38.4	44.9	46.5	46.8
U.S. Treasury Securities	60.6	61.1	61.4	62.2	60.9	55.3	56.7	57.2
Non-Financial Equity Derivatives	57.7	50.9	50.6	51.2	50.8	57.0	53.7	51.4
Sovereign Bonds - Non-U.S. G10	54.3	54.4	52.3	51.9	49.8	48.6	50.0	48.5
Credit Derivatives	49.6	43.5	41.9	42.5	45.3	46.8	46.6	47.0
Cash/Cash Equivalents - Other	80.4	77.5	79.4	78.4	74.9	71.4	75.1	73.2
Commodity Derivatives	64.2	60.8	63.3	67.1	68.8	67.1	67.0	63.8
Non-Financial Unlisted Equities	99.9	99.9	99.8	99.1	99.8	99.7	99.7	99.8
Financial Listed Equities	68.5	69.7	69.4	70.2	73.3	72.4	72.4	73.4
Sovereign Bonds - Other	75.7	77.3	77.9	75.5	75.9	75.6	69.5	70.2
Non-Financial Corporate Bonds	82.1	86.8	86.3	85.2	84.4	81.9	81.0	79.1
Non-U.S. Currency Holdings	52.6	56.2	51.5	49.0	54.9	53.3	53.3	56.8
Leveraged Loans	99.5	99.5	98.2	99.4	99.5	98.3	99.4	98.0
Cash/Cash Equivalents - Deposits	61.0	73.9	70.9	72.3	73.9	72.9	75.4	72.8
MBS	81.5	85.9	84.1	82.4	80.8	82.2	73.6	71.9
Other Derivatives	42.1	42.3	49.8	65.5	42.6	44.1	48.9	61.9
Cash/Cash Equivalents - MMFs	98.9	***	***	***	***	***	***	***
Non-Financial Convertible Bonds	94.5	93.5	99.2	98.7	98.4	97.9	97.8	97.7
Other Private Funds	99.8	99.8	99.7	99.7	***	***	99.5	99.9
Physical Real Estate	***	***	***	***	***	***	***	***
Other Loans (Excluding Repo)	90.4	88.2	90.9	91.0	88.8	93.5	93.1	91.7
Financial Equity Derivatives	55.3	54.6	54.9	55.1	57.7	59.8	60.6	60.1
Other	96.3	94.3	94.4	95.0	94.9	94.6	95.3	96.1
Financial Corporate Bonds	92.0	92.7	91.5	91.5	90.0	89.5	88.3	87.1
Other ABS/Structured Products	93.9	94.7	94.6	92.4	92.7	86.7	84.5	85.3
U.S. Agency and GSE Securities	75.4	87.8	86.7	85.0	78.5	72.5	59.3	65.0
CDO/CLO	***	***	***	***	***	***	***	***
Financial Unlisted Equities	99.4	99.8	99.8	99.9	99.8	99.7	99.8	99.7
U.S. State and Local Bonds	99.5	99.1	***	98.6	98.4	98.3	97.9	98.2
Registered Investment Companies	97.5	96.6	92.8	97.3	***	***	96.2	97.9
Financial Convertible Bonds	95.8	96.7	96.8	97.1	97.4	97.3	95.8	95.0
Physical Commodities	***	99.1	99.1	99.3	99.4	99.6	***	98.4

# E Number of Positions

Figure 12: Number of Positions Reported by Qualifying Hedge Funds As reported on Form PF, Question 34.



### F Liquidity

**Table 48:** Investor Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 50.

Liquidation Period	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
At most 1 day	7.7	7.8	7.6	7.7	6.8	6.2	7.8	7.5
At most 7 days	13.1	12.9	13.1	13.2	10.1	9.5	11.7	11.2
At most 30 days	26.5	25.8	24.7	24.6	22.7	22.4	23.6	23.1
At most 90 days	46.3	44.5	42.9	42.8	43.7	39.8	40.4	40.3
At most 180 days	56.9	55.4	53.5	54.7	51.7	51.1	51.3	52.3
At most 365 days	68.9	67.6	66.9	66.1	64.7	63.8	64.6	63.5

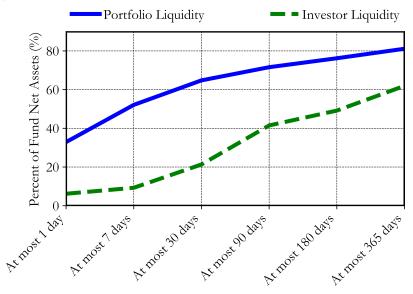
**Table 49:** Portfolio Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)

As reported on Form PF, Questions 9, 26, 30, and 32.

Liquidation Period	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
At most 1 day	34.8	39.5	37.9	35.5	32.6	33.4	33.8	33.3
At most 7 days	57.0	59.6	59.0	56.9	55.1	54.8	54.8	53.4
At most 30 days	70.1	70.6	70.4	69.7	68.5	67.7	67.6	66.1
At most 90 days	76.4	75.9	76.4	75.9	75.1	74.2	74.1	73.0
At most 180 days	80.3	79.5	80.5	80.1	79.4	78.3	78.2	77.3
At most 365 days	85.2	83.8	84.7	84.6	84.2	83.5	83.2	82.2

Figure 13: Asset Weighted-Average Qualifying Hedge Fund
Investor and Portfolio Liquidity

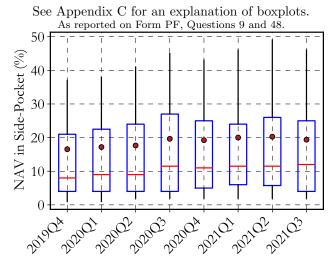
As reported on Form PF, Questions 9, 26, 30, 32, and 50 as of Third Calendar Quarter 2021.



**Table 50:** Restrictions on Qualifying Hedge Fund Assets (\$ Billions) As reported on Form PF, Questions 48 and 49.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
May Suspend	2,430	2,162	2,375	2,500	2,622	2,720	2,955	2,975
May Have Gates	1,553	1,386	1,521	1,608	1,732	1,809	1,908	1,921
Side-Pocketed	47	47	54	61	73	89	100	108
Gated	42	47	56	50	64	76	78	84
Suspended	15	22	18	15	20	19	18	18

**Figure 14:** Percentage of Qualifying Hedge Fund NAV Subject to a Side-Pocket Arrangement



### G Borrowings

**Table 51:** Borrowings of Qualifying Hedge Funds (\$ Billions) As reported on Form PF, Question 43 (Third Month).

Type	Subtype	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	3,163	2,879	2,885	3,192	3,220	3,255	3,586	3,669
Secured	Prime Broker	1,410	1,067	1,302	1,415	1,616	1,709	1,930	1,918
Secured	Reverse Repo	1,302	1,371	1,169	1,330	1,201	1,066	1,113	1,205
	Other Secured	450	440	415	447	403	480	542	547
Unsecured	Subtotal	18_		14_	13	14	16	17	32
Total	Total	3,180	2,899	2,899	3,205	3,234	3,271	3,603	3,701

**Table 52:** Aggregate Borrowing by Creditor Entity Type (Percent) As reported on Form PF, Question 43 (Third Month).

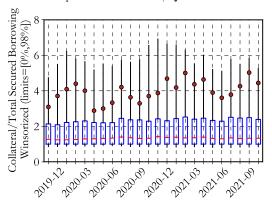
Creditor Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
US Financial	63.0	61.2	63.4	61.0	64.5	65.2	65.8	64.5
Non-US Financial	36.4	38.1	36.0	38.3	34.8	34.1	33.6	34.8
US Non-Financial	***	0.6	***	0.6	***	0.6	0.5	0.6
Non-US Non-Financial	***	0.1	***	0.1	***	0.1	0.1	0.1

**Table 53:** Aggregate Collateral for Secured Borrowings of Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Question 43 (Third Month).

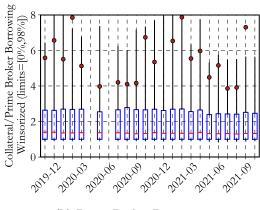
Borrowing Type	Collateral Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
	Subtotal	1,771	1,411	1,716	1,861	2,134	2,230	2,453	2,433
Prime Broker	Other	1,222	956	1,183	1,293	1,508	$1,\!556$	1,658	1,581
	Cash	549	455	533	568	626	673	795	851
	Subtotal	1,316	1,475	1,203	1,362	1,273	1,090	1,166	1,271
Reverse Repo	Other	801	877	773	912	866	742	811	908
	Cash	515	599	431	451	407	348	355	363
	Subtotal	498	512	486	513	497	594	658	707
Other Secured	Other	344	353	344	379	389	435	476	521
	Cash	154	159	142	134	108	159	182	186
Total	Total	3,584	3,398	3,405	3,736	3,904	3,913	4,277	4,410

Figure 15: Ratio of Collateral Posted to Secured Borrowing for Qualifying Hedge Funds

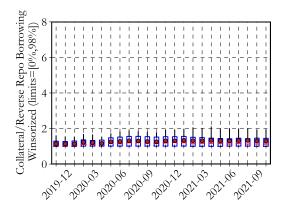
See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Question 43.



(a) Total Secured Borrowing



(b) Prime Broker Borrowing



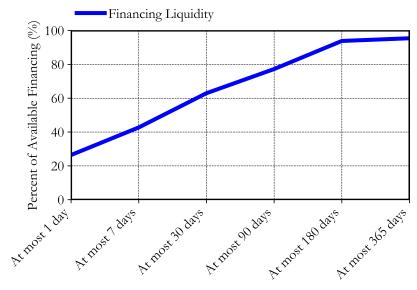
(c) Reverse Repo Borrowing

**Table 54:** Financing Liquidity for Qualifying Hedge Funds (Percent of Available Financing)

As reported on Form PF, Question 46.

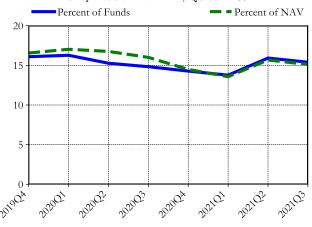
Financing Available	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
At most 1 day	29.1	37.1	39.2	39.0	27.8	37.4	36.5	36.5
At most 7 days	47.9	50.5	50.7	51.1	44.5	45.0	46.9	47.8
At most 30 days	67.4	70.0	66.7	67.5	65.4	65.3	64.9	64.9
At most 90 days	82.8	83.9	81.2	80.9	79.3	78.7	76.9	76.6
At most 180 days	94.9	94.3	94.5	94.7	94.9	94.4	94.5	94.5
At most $365 \text{ days}$	96.0	95.3	95.9	96.0	96.1	95.5	95.8	95.5

Figure 16: Weighted-Average Qualifying Hedge Fund Financing Liquidity (Percent of Available Financing) As reported on Form PF, Question 46 as of Third Calendar Quarter 2021.



# H Central Clearing

Figure 17: Qualifying Hedge Funds Using Central Clearing As reported on Form PF, Question 39.



# I Value-at-Risk ("VaR") Reporting

**Table 55:** Number of Qualifying Hedge Funds Using VaR As reported on Form PF, Question 40.

VaR Method	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
VaR (Any Method)	673	669	665	628	613	597	657	663
Historical Simulation	317	311	311	285	278	269	272	266
Monte Carlo Simulation	174	176	169	167	168	171	194	199
Parametric	182	178	181	175	162	158	186	193
Other	43	48	46	43	43	45	50	53
VaR Not Used	1,148	1,156	1,149	$1,\!152$	1,180	1,263	1,309	1,350

**Table 56:** Aggregate Qualifying Hedge Fund GAV Managed Using VaR (\$ Billions) As reported on Form PF, Questions 8 and 40.

VaR Method	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
VaR (Any Method)	3,938	3,784	3,685	3,918	3,886	3,808	4,267	4,590
Historical Simulation	2,062	1,955	1,838	1,979	2,009	1,992	2,247	2,322
Monte Carlo Simulation	736	704	804	836	883	871	988	984
Parametric	797	739	742	769	633	632	698	735
Other	913	868	807	845	898	846	905	1,127
VaR Not Used	2,775	2,538	2,719	2,906	3,210	3,424	3,626	3,711

**Table 57:** Aggregate Qualifying Hedge Fund NAV Managed Using VaR (\$ Billions) As reported on Form PF, Questions 9 and 40.

VaR Method	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
VaR (Any Method)	1,378	1,232	1,334	1,374	1,345	1,355	1,518	1,542
Historical Simulation	560	507	548	564	578	586	619	619
Monte Carlo Simulation	351	318	341	351	361	368	432	443
Parametric	452	382	422	434	376	373	432	437
Other	121	131	140	147	145	156	170	185
VaR Not Used	1,861	1,685	1,881	2,027	2,229	2,384	2,539	2,619

### J Stress Testing and VaR

**Table 58:** Number of Qualifying Hedge Funds Managed Using VaR or Market Factor Change Testing ("Stress Testing")

As reported on Form PF, Questions 40 and 42.

Risk Tool Used	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Stress and VaR	596	600	598	568	555	535	565	556
Stress, No VaR	448	428	433	430	400	435	450	472
No Stress, VaR	77	69	67	60	58	62	92	107
Neither	700	728	716	722	780	828	859	878

**Table 59:** Aggregate Qualifying Hedge Fund GAV Managed Using VaR or Stress Testing (\$ Billions) As reported on Form PF, Questions 8, 40, and 42.

Risk Tool Used	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Stress and VaR	3,750	3,594	3,332	3,692	3,524	3,545	3,955	4,226
Stress, No VaR	1,299	1,148	1,237	1,302	1,383	1,435	1,496	1,538
No Stress, VaR	188	190	353	226	362	263	312	364
Neither	1,476	1,390	1,482	1,604	1,827	1,989	2,130	2,173

Table 60: Aggregate Qualifying Hedge Fund NAV Managed Using VaR or Stress Testing (\$ Billions) As reported on Form PF, Questions 9, 40, and 42.

Risk Tool Used	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Stress and VaR	1,254	1,122	1,194	1,243	1,189	1,206	1,314	1,288
Stress, No VaR	741	651	732	781	819	846	887	936
No Stress, VaR	124	111	140	130	156	150	204	254
Neither	1,120	1,034	1,149	1,246	1,411	1,538	1,653	1,683

### K Stress Testing

**Table 61:** Number of Qualifying Hedge Funds Stressing Each Market Factor As reported on Form PF, Question 42.

Market Factor	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Equity Prices	881	866	862	836	796	789	826	844
Currency Rates	776	765	762	730	690	710	741	748
Risk Free Rates	753	741	749	717	666	669	700	708
Credit Spreads	664	653	652	630	584	575	616	610
Implied Volatilities	555	535	535	518	473	463	485	501
Commodity Prices	484	461	476	459	413	399	419	428
Bond Default Rates	266	256	266	258	229	241	253	268
ABS Default Rates	225	205	218	214	188	202	225	228

**Table 62:** Aggregate GAV of Qualifying Hedge Funds Stressing Each Market Factor (\$ Billions)
As reported on Form PF, Questions 8 and 42.

Market Factor	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Equity Prices	4,393	4,137	3,877	4,407	4,395	4,461	4,880	5,194
Currency Rates	4,016	3,822	3,621	4,021	3,917	3,972	4,375	4,646
Risk Free Rates	4,335	4,130	3,873	4,229	4,062	4,210	4,628	4,927
Credit Spreads	3,666	3,527	3,133	3,582	3,486	3,512	3,912	4,228
Implied Volatilities	3,550	3,320	3,079	3,471	3,196	3,250	3,624	3,909
Commodity Prices	3,311	3,204	2,851	3,371	3,186	3,254	3,605	3,883
Bond Default Rates	984	937	876	914	872	882	1,001	1,136
ABS Default Rates	871	832	762	789	738	752	852	882

**Table 63:** Aggregate NAV of Qualifying Hedge Funds Stressing Each Market Factor (\$ Billions)
As reported on Form PF, Questions 9 and 42.

Market Factor	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Equity Prices	1,773	1,563	1,704	1,799	1,779	1,826	1,948	1,989
Currency Rates	1,551	1,387	1,496	1,571	1,520	1,553	1,679	1,675
Risk Free Rates	1,507	1,345	1,446	1,496	1,415	1,508	1,620	1,623
Credit Spreads	1,338	1,180	1,269	1,333	1,247	1,266	1,388	1,377
Implied Volatilities	1,128	1,001	1,074	1,144	1,043	1,071	1,152	1,167
Commodity Prices	1,098	982	1,057	1,115	1,019	1,037	1,114	1,123
Bond Default Rates	392	339	396	403	376	387	424	482
ABS Default Rates	347	294	348	358	329	340	380	379

**Table 64:** Number of Qualifying Hedge Funds Stressing Market Factors As reported on Form PF, Question 42.

Factors Tested	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
0	777	797	783	782	838	890	951	985
1	181	182	183	183	178	202	210	214
2	118	115	112	110	118	117	121	130
3	95	94	107	98	98	90	96	83
4	105	107	100	100	103	105	107	101
5	131	124	119	108	113	117	127	137
6	206	217	204	196	169	157	155	155
7	73	74	75	75	68	61	60	71
8	135	115	131	128	108	121	139	137

**Table 65:** Aggregate GAV of Qualifying Hedge Funds Stressing Market Factors (\$ Billions) As reported on Form PF, Questions 8 and 42.

Factors Tested	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
0	1,665	1,581	1,834	1,830	2,189	2,253	2,441	2,538
1	416	365	414	424	466	414	425	444
2	544	475	493	510	528	596	638	629
3	339	290	431	336	315	302	342	324
4	277	276	270	266	313	341	346	363
5	776	763	740	841	849	831	926	929
6	1,860	1,784	1,461	1,810	1,665	1,722	1,890	2,101
7	243	203	250	260	275	263	279	360
8	595	584	511	547	497	511	605	613

**Table 66:** Aggregate NAV of Qualifying Hedge Funds Stressing Market Factors (\$ Billions) As reported on Form PF, Questions 9 and 42.

Factors Tested	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
0	1,244	1,144	1,288	1,376	1,566	1,688	1,856	1,937
1	269	240	267	278	308	272	284	300
2	212	191	214	230	264	307	328	322
3	189	170	199	208	229	217	247	231
4	162	145	142	148	146	166	163	176
5	271	237	254	266	273	282	318	321
6	567	503	509	546	463	480	491	477
7	122	119	123	126	127	120	124	170
8	202	168	218	222	198	207	246	227

# IX Section 3 Liquidity Fund Specific Information

#### A Liquidity

**Table 67:** Investor Liquidity For Section 3 Liquidity Funds (Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 64.

Liquidation Period	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
At most 1 day	73.7	75.6	73.4	72.9	72.9	72.2	70.3	68.6
At most 7 days	95.7	95.9	95.2	95.4	94.8	93.6	92.8	92.6
At most 30 days	99.7	99.7	99.1	99.1	98.6	98.1	97.2	97.3
At most 90 days	99.8	99.9	99.6	99.5	99.3	98.9	98.2	97.8
At most 180 days	99.9	99.9	99.9	99.9	99.7	99.4	99.0	98.8
At most 365 days	99.9	100.0	100.0	99.9	100.0	99.9	99.7	99.8

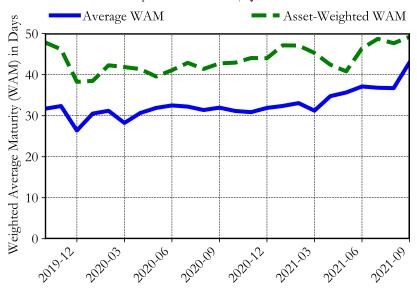
**Table 68:** Suspensions and Gates of Section 3 Liquidity Funds (\$ Billions)

As reported on Form PF, Question 63.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
May Suspend	274	275	282	303	303	280	296	278
May Have Gates	241	239	251	273	270	247	263	245
Suspended	0	0	0	0	0	0	0	0
Gated	0	0	0	0	0	0	0	0

#### **B** Portfolio Characteristics

**Figure 18:** Weighted-Average Maturity Reported by Section 3 Liquidity Funds As reported on Form PF, Question 55.



**Figure 19:** Weighted-Average Life Reported by Section 3 Liquidity Funds As reported on Form PF, Question 55.



**Figure 20:** Seven-Day Gross Yield Reported by Section 3 Liquidity Funds As reported on Form PF, Question 55.



Figure 21: Ratio of Daily Liquid Assets to Net Asset Value of Section 3 Liquidity Funds
As reported on Form PF, Question 55.

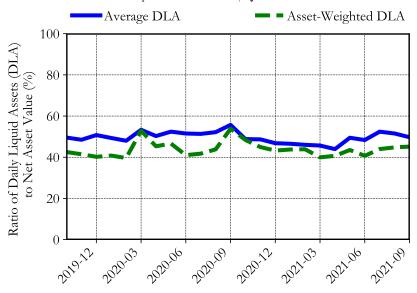
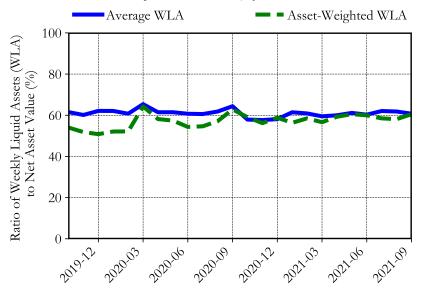


Figure 22: Ratio of Weekly Liquid Assets to Net Asset Value of Section 3 Liquidity Funds As reported on Form PF, Question 55.



### C Rule 2a-7 Compliance

**Table 69:** Rule 2a-7 Compliance (Percent of Funds) As reported on Form PF, Questions 9 and 54.

Compliance Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
None	37.2	39.0	37.8	38.3	45.3	46.3	48.2	50.9
Credit Quality	62.8	61.0	62.2	61.7	54.7	53.7	51.8	49.1
Diversification	58.1	56.1	57.8	57.4	50.9	50.0	48.2	45.6
Maturity	58.1	56.1	57.8	57.4	50.9	50.0	48.2	45.6
Liquidity	53.5	51.2	53.3	53.2	47.2	46.3	44.6	42.1
Fully	48.8	46.3	48.9	48.9	43.4	42.6	39.3	38.6

**Table 70:** Rule 2a-7 Compliance (Percent of Aggregate NAV) As reported on Form PF, Questions 9 and 54.

Compliance Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
None	87.2	86.9	86.3	86.9	86.4	83.7	81.6	80.9
Credit Quality	12.8	13.1	13.7	13.1	13.6	16.3	18.4	19.1
Diversification	12.2	12.4	12.9	12.1	12.3	14.9	17.1	17.4
Maturity	12.2	12.4	12.9	12.1	12.3	14.9	17.1	17.4
Liquidity	12.0	12.1	12.6	11.8	12.1	14.7	16.9	17.2
Fully	10.1	10.2	10.6	9.9	10.1	12.7	14.3	15.0

# D Methods of Calculating NAV

**Table 71:** NAV Calculation Method (Percent of Funds) As reported on Form PF, Questions 9, 52, and 53.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Stable	74.4	75.6	73.3	74.5	73.6	75.9	75.0	77.2
Floating	25.6	24.4	26.7	25.5	26.4	24.1	25.0	22.8

**Table 72:** NAV Calculation Method (Percent of Aggregate NAV) As reported on Form PF, Questions 9, 52, and 53.

Type	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Stable	64.8	68.4	68.2	70.1	66.6	69.0	66.1	66.7
Floating	35.2	31.6	31.8	29.9	33.4	31.0	33.9	33.3

# E Aggregate Portfolio Holdings

**Table 73:** Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 1 of 2 As reported on Form PF, Question 63.

	2019.10	2019.11	2019.12	2020.01	20,00	2020.03	2020.04	202a.05	2020.06	<sup>2</sup> 020.05	202a.08	-0200
Product Type	\$	\$.	\$	₺.	\$.	\$.	S.	\$.	\$.	\$.	S.	\$.
U.S. Treasuries	49.8	55.3	60.0	42.4	41.1	86.1	101.2	107.0	108.4	102.1	101.2	108.5
Deposits	65.4	71.2	66.3	81.7	78.8	59.9	65.4	59.2	55.0	62.1	55.4	54.2
Commercial Paper	43.8	42.6	41.9	44.6	49.3	32.2	38.6	34.8	37.7	38.7	43.6	40.8
Repo - Govt. Collateral	51.7	46.8	45.9	43.7	44.7	46.1	25.2	28.1	30.7	35.0	44.4	42.3
Other	42.1	40.2	40.4	37.0	32.9	31.0	28.3	30.8	37.0	39.9	32.2	30.7
Asset-Backed Securities	18.2	17.6	16.8	18.4	17.8	14.2	20.1	21.3	20.3	21.4	21.0	19.6
Repo - Other Collateral	10.0	9.6	8.3	8.7	8.7	9.1	9.9	12.0	14.4	15.5	15.8	16.5
U.S. Govt. Debt	1.9	1.9	1.8	1.8	2.0	2.3	2.9	2.3	2.4	2.3	1.9	2.2
Municipal Debt	0.7	0.7	0.7	0.7	0.7	0.9	1.0	1.1	1.3	1.5	1.4	1.3

	20,10	azi	a Sy	2021-01	3051.00	2021-03	2021.04	2,05	2021.00	2021.05	2,0%	2021-00
Product Type	420. A.A.	2020	Sold Sold Sold Sold Sold Sold Sold Sold	30	So.	So,	So.		So.	So,	67,7	So,
U.S. Treasuries	107.3	103.1	104.1	97.2	89.5	91.9	82.7	86.1	94.8	86.4	80.2	73.1
Deposits	58.3	61.8	52.8	63.7	69.1	59.5	76.0	80.0	69.9	83.1	75.5	69.7
Commercial Paper	34.7	36.9	37.7	45.2	45.3	48.8	50.0	53.4	51.2	52.3	51.7	51.4
Repo - Govt. Collateral	33.0	31.7	39.0	27.7	25.8	23.9	23.8	26.1	32.1	26.0	35.2	40.2
Other	32.5	36.6	38.7	34.6	36.2	36.9	33.4	29.1	27.9	24.0	21.0	26.0
Asset-Backed Securities	17.3	19.6	20.9	20.0	20.3	22.8	21.8	22.3	21.7	20.9	21.0	23.0
Repo - Other Collateral	17.0	19.9	18.0	18.3	17.9	13.3	13.2	12.4	15.1	12.4	11.6	12.1
U.S. Govt. Debt	1.7	1.9	1.8	1.9	1.6	1.4	1.5	1.3	1.4	1.3	1.2	1.4
Municipal Debt	0.9	0.8	0.9	0.9	0.9	1.1	1.2	1.2	1.1	0.9	0.9	1.1

# X Section 4 Private Equity Fund Specific Information

# A CPC Industry Concentration

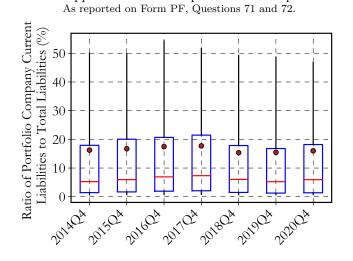
Table 75: Gross Assets in CPC Industries (Percent of Total)
As reported on Form PF, Questions 8 and 77.

Type	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Software Publishers	3.8	4.9	6.1	6.0	8.0	10.6	9.7
Electric Power Generation,	3.8	3.7	4.1	4.2	4.5	4.3	4.8
Telecommunications Data Processing	2.5	2.7	2.3	2.2	2.4	2.6	3.7
Data Processing, Hosting, &	2.3	1.8	2.0	2.3	3.5	4.2	3.6
Other Financial Investment	1.8	1.8	1.7	1.4	2.1	2.1	2.8
Other Information Services	2.1	1.9	1.8	2.0	1.7	1.9	2.5
Pharmaceutical & Medicine Mfg	1.3	1.5	1.4	1.5	2.4	2.0	2.1
Oil & Gas Extraction	7.8	5.8	6.7	6.2	4.9	3.6	1.9
Custom Computer Programming	1.0	1.5	1.5	1.5	1.8	2.1	1.9
All Other Professional,	0.6	0.6	0.9	0.8	1.4	1.4	1.9
Other Financial Vehicles	0.4	0.6	1.8	1.6	1.3	1.2	1.8
Insurance Agencies & Brokerages	1.0	1.0	1.2	1.1	1.0	1.1	1.5
Management, Scientific, &	1.2	1.1	1.3	1.6	1.4	1.6	1.4
Scientific Research & Development	0.9	1.0	0.7	1.0	1.0	1.7	1.3
Pipeline Transportation	2.6	2.4	2.2	1.9	1.8	1.7	1.3
Educational Services	1.3	1.3	1.2	1.4	1.2	1.1	1.3
Other Computer Related Services	0.4	0.5	0.9	0.9	1.0	0.8	1.2
Activities Related to Credit	1.2	1.4	1.0	1.2	1.3	1.4	1.2

### B CPC Financial Leverage

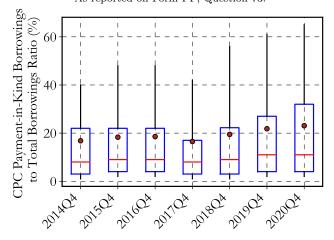
**Figure 23:** Distribution of Ratio of Aggregate CPC Current Liabilities to Total Liabilities of Section 4 Private Equity Funds

See Appendix C for an explanation of boxplots.



**Figure 24:** Distribution of CPC Payment-in-Kind or Zero Coupon Borrowings to Total Borrowings Ratio See Appendix C for an explanation of boxplots.

As reported on Form PF, Question 73.



# C CPC Investments by Region and Country

**Table 76:** Aggregate Gross Value of Private Equity Investments by Region (\$ Billions)
As reported on Form PF, Questions 70 and 78.

Region	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
North America	4,506	4,132	3,942	3,961	4,211	5,163	6,633
Europe EEA	1,259	941	848	963	1,256	1,547	$2,\!155$
Asia	462	447	406	379	435	561	1,028
Europe Other	9	21	22	40	46	69	158
South America	85	58	111	184	140	149	141
Supranational	67	23	37	49	55	60	78
Middle East	12	9	15	23	16	18	44
Africa	12	12	18	14	10	15	9

**Table 77:** Private Equity CPC Investments by Region (Percent of Aggregate CPC Gross Asset Value)

As reported on Form PF, Questions 70 and 78.

Region	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
North America	70.2	73.2	73.0	70.5	68.2	68.0	64.7
Europe EEA	19.6	16.7	15.7	17.1	20.3	20.4	21.0
Asia	7.2	7.9	7.5	6.8	7.0	7.4	10.0
Europe Other	0.1	0.4	0.4	0.7	0.7	0.9	1.5
South America	1.3	1.0	2.0	3.3	2.3	2.0	1.4
Supranational	1.0	0.4	0.7	0.9	0.9	0.8	0.8
Middle East	0.2	0.2	0.3	0.4	0.3	0.2	0.4
Africa	0.2	0.2	0.3	0.3	0.2	0.2	0.1

**Table 78:** Aggregate Gross Asset Value of Private Equity CPC Investments by Country (\$ Billions)
As reported on Form PF, Questions 70 and 78.

Country	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
United States	4,305	3,943	3,776	3,794	4,015	4,803	6,243
Japan	98	85	79	52	52	78	283
China and Hong Kong	186	173	114	147	154	149	235
India	83	89	92	73	104	128	229
Brazil	58	41	88	131	96	93	78
Russia	2	5	4	4	2	1	1

**Table 79:** Private Equity CPC Investments by Country (Percent of Aggregate CPC Gross Asset Value)

As reported on Form PF, Questions 70 and 78.

Country	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
United States	67.1	69.9	69.9	67.6	65.1	63.3	60.9
Japan	1.5	1.5	1.5	0.9	0.8	1.0	2.8
China and Hong Kong	2.9	3.1	2.1	2.6	2.5	2.0	2.3
India	1.3	1.6	1.7	1.3	1.7	1.7	2.2
Brazil	0.9	0.7	1.6	2.3	1.6	1.2	0.8
Russia	0.0	0.1	0.1	0.1	0.0	0.0	0.0

### XI Appendices

#### A Form PF Filer Categories

The amount of information an adviser must report and the frequency with which it must report on Form PF depends on the amount of the adviser's private fund assets and the types of private funds managed. Reporting advisers must identify the types of private funds they manage on Form PF.

#### 1 All Private Fund Advisers

SEC-registered investment advisers with at least \$150 million in private fund assets under management are required to file Form PF. Registered investment advisers with less than \$150 million in private funds assets under management, exempt reporting advisers, and state-registered advisers report general private fund data on Form ADV, but do not file Form PF.<sup>6</sup> Not all Form PF filers report on a quarterly basis. Smaller private fund advisers and all private equity fund advisers file Form PF on an annual basis, while larger hedge fund advisers and larger liquidity fund advisers file the form quarterly.<sup>7</sup> As a result of the difference in reporting frequency, information in this report related to funds that are reported annually may be dated by several months.<sup>8</sup>

#### 2 Large Hedge Fund Advisers

Large Hedge Fund Advisers have at least \$1.5 billion in hedge fund assets under management. A Large Hedge Fund Adviser is required to file Form PF quarterly and provide data about each hedge fund it managed during the reporting period (irrespective of the size of the fund).

Large Hedge Fund Advisers must report more information on Form PF about Qualifying Hedge Funds than other hedge funds they manage during the reporting period. A Qualifying Hedge Fund is any hedge fund advised by a Large Hedge Fund Adviser that had a NAV (individually or in combination with any feeder funds, parallel funds, and/or dependent parallel managed accounts) of at least \$500 million as of the last day of any month in the fiscal quarter immediately preceding the adviser's most recently completed fiscal quarter. This report provides information about all hedge funds reported by Large Hedge Fund Advisers, including Qualifying Hedge Funds and smaller hedge funds. This report also provides an overview of certain data reported solely for Qualifying Hedge Funds.

<sup>&</sup>lt;sup>6</sup>Note that these thresholds are on a gross basis. Exempt reporting advisers are advisers that rely on the exemptions from SEC registration in Advisers Act section 203(l) for venture capital fund advisers and section 203(m) for advisers managing less than \$150 million in private fund assets in the U.S.

<sup>&</sup>lt;sup>7</sup>An adviser may be a large hedge fund adviser that must file quarterly to report data about the hedge funds it manages as well as a private equity fund adviser that must file only annually to report data about the private equity funds it manages.

<sup>&</sup>lt;sup>8</sup>In addition, because some Form PF filers have fiscal year ends that are not December 31, not all Form PF data is filed as of a single date.

#### 3 Large Liquidity Fund Advisers

Large Liquidity Fund Advisers have at least \$1 billion in combined liquidity fund and money market fund assets under management. On a quarterly basis, such advisers report on Form PF data about the liquidity funds they managed during the reporting period (irrespective of the size of the fund). This report contains information about all liquidity funds reported by Large Liquidity Fund Advisers (referred to in this report as "Section 3 Liquidity Funds").

#### 4 Large Private Equity Fund Advisers

Large Private Equity Fund Advisers have at least a \$2 billion in private equity fund assets under management. These advisers are required to file Form PF annually in connection with the private equity funds they managed during the reporting period. Smaller Private Equity Fund Advisers must file annually as well, but provide less detail regarding the private equity funds they manage. This report provides information about private equity funds managed by Large Private Equity Fund Advisers (referred to in this report as "Section 4 Private Equity Funds").

#### 5 Other Private Fund Advisers

All advisers required to file Form PF that are not Large Hedge Fund Advisers or Large Liquidity Fund Advisers must file Form PF annually to report data about each private fund managed by the adviser. These "annual filing advisers" include smaller fund advisers, Large Private Equity Fund advisers, and venture capital fund advisers. Annual filers must provide specific information about each of the private funds they manage on an annual basis.

<sup>&</sup>lt;sup>9</sup>This includes "other private funds," which are private funds that do not meet the Form PF definition of hedge fund, liquidity fund, private equity fund, real estate fund, securitized asset fund, or venture capital fund.

### B Handling Annual and Quarterly Data

Only a subset of filers (Large Hedge Fund Advisers and Large Liquidity Fund Advisers) are required to file Form PF quarterly; all other filings are made annually. Annual filings are typically, but not always, made at the end of the calendar year, as Form PF allows filings to be made at the end of an adviser's fiscal year. In order to present the most complete and recent data possible, while accounting for differences in filing dates, we use the following procedure for determining which data to consider in any given quarter:

First, filings are grouped by their report date within their reported year:

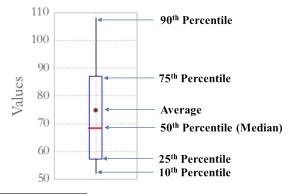
- (Q1): February 15 to May 14
- (Q2): May 15 to August 14
- (Q3): August 15 to November 14
- (Q4): November 15 to February 14

Then, responses for funds that have no information are 'filled forward' — essentially, copied from last reported values — up to a maximum of three quarters. Any fund that has no data four quarters after its most recent date is no longer counted or included in any calculations.<sup>10</sup>

### C How to Read a Boxplot

In these figures, the boxes extend from the twenty-fifth percentile to the seventy-fifth percentile, while the levels (the dashed vertical lines) extend from the tenth to the twenty-fifth percentile as well as the seventy-fifth to the ninetieth percentile. Also shown as a red line within the box is the median (the fiftieth percentile) and the horizontal dashed line is mean of the distribution. See Figure 25 for an explanation of each feature.

Figure 25: How to Read a Boxplot



<sup>&</sup>lt;sup>10</sup>Form PF has no requirement to inform the SEC if a fund liquidates or otherwise terminates operations. Therefore, liquidations or terminations may not be reflected on this report for up to one year after ceasing operations.

#### D Mitigating the Effects of Outliers

Form PF data occasionally contains spurious outliers. While Analytics Office staff actively engages in outreach to identify and correct such values, not all aberrant values have been corrected as of this writing. To reduce the effect of these outliers on the aggregate measures reported here, we have chosen to winsorize or trim some data sets.

Winsorization is a technique for reducing the effect of outliers by reducing the size of the largest and smallest values in a distribution. For example, to calculate a 95%/5% winsorized data set, all the values above the ninety-fifth percentile are set to the value of the ninety-fifth percentile, and all the values below the fifth percentile are set to the value of the fifth percentile. Effectively, this procedure makes the very largest values smaller (but still large), and all the smallest values larger (but still small). This approach can be more effective than trimming (simply removing the largest and/or smallest values) because it does not change the number of data points and does not change the median or other percentile values within the 95%/5% range. All instances of winsorization or trimming have been noted and include the affected percentiles.

 $<sup>^{11}\</sup>text{Such}$  techniques are known as 'robust statistics', reviewed for example in Wilcox (2012), Introduction to Robust Estimation & Hypothesis Testing, 3rd Edition.

#### E Definitions

Included by reference are all definitions included in the glossary of Form PF.

Aggregate Exposure A dollar value for long and short positions as of the last day in each

month of the reporting period, by sub-asset class, including all exposure whether held physically, synthetically or through derivatives. Includes closed out and OTC forward positions that have not expired, as well as

positions in side-pockets.

Borrowing In Form PF, borrowings include secured borrowings, unsecured borrow-

ings, as well as synthetic borrowings (e.g., total return swaps that meet

the failed sale accounting requirements).

CPC Controlled portfolio company, as defined in Form PF.

Gross Notional Exposure (GNE) The gross nominal or notional value of all transactions that have been

entered into but not yet settled as of the data reporting date. For contracts with variable nominal or notional principal amounts, the basis for reporting is the nominal or notional principal amounts as of the data

reporting date.

Hedge Fund Any private fund (other than a securitized asset fund): (a) with respect

to which one or more investment advisers (or related persons of investment advisers) may be paid a performance fee or allocation calculated by taking into account unrealized gains (other than a fee or allocation the calculation of which may take into account unrealized gains solely for the purpose of reducing such fee or allocation to reflect net unrealized losses); (b) that may borrow an amount in excess of one-half of its net asset value (including any committed capital) or may have gross notional exposure in excess of twice its net asset value (including any committed capital); or (c) that may sell securities or other assets short or enter into similar transactions (other than for the purpose of hedging currency exposure or managing duration). The definition of a hedge fund for Form PF purposes also includes any commodity pool an adviser

reports on Form PF.

IRDs Interest rate derivatives, including foreign exchange derivatives used for

either investment or hedging.

Large Hedge Fund Adviser An adviser that has at least \$1.5 billion in hedge fund assets under

management.

Large Liquidity Fund Adviser An adviser that has at least \$1 billion in combined liquidity fund and money market fund assets under management.

Large Private Equity Fund Adviser An adviser that has at least a \$2 billion in private equity fund assets under management.

Parallel Managed Account

An account advised by an adviser that pursues substantially the same investment objective and strategy and invests side by side in substan-

tially the same positions as the reporting fund.

Qualifying Hedge Fund Adviser that has a net asset value (individually or in combination with any feeder funds, parallel

funds, and/or dependent parallel managed accounts) of at least \$500 million as of the last day of any month in the fiscal quarter immediately

preceding the adviser's most recently completed fiscal quarter.

Section 3 Liquidity Fund A liquidity fund advised by a Large Liquidity Fund Adviser.

Section 4 Private Equity Fund A private equity fund advised by a Large Private Equity Fund Adviser.

Value For derivatives (other than options), "value" means gross notional value; for options, "value" means delta adjusted notional value; for all other investments and for all borrowings where the reporting fund is the creditor, "value" means market value or, where there is not a readily available market value, fair value; for borrowings where the reporting fund is the debtor, "value" means the value you report internally and to current

and prospective investors.